Country Cancer Profile 2025

European Commission

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The Country Cancer Profile Series

The European Cancer Inequalities Registry is a flagship initiative of Europe's Beating Cancer Plan. It provides sound and reliable data on cancer prevention and care to identify trends, disparities and inequalities between Member States, regions and population groups. The Country Cancer Profiles identify strengths, challenges and specific areas of action for each of the 27 EU Member States, Iceland and Norway, to guide investment and interventions at the EU, national and regional levels under Europe's Beating Cancer Plan. The European Cancer Inequalities Registry also supports Flagship 1 of the Zero Pollution Action Plan. The Profiles are the work of the OECD in co-operation with the European Commission. The team is grateful for the valuable inputs received from national experts and comments provided by the OECD Health Committee and the EU Thematic Working Group on Cancer Inequality Registry.

Data and information sources

The data and information in the Country Cancer Profiles are based mainly on national official statistics provided to Eurostat and the OECD, which were validated to ensure the highest standards of data comparability. The sources and methods underlying these data are available in the Eurostat Database and the OECD Health Database.

Additional data and information also come from the European Commission's Joint Research Centre (EC-JRC), the EU statistics on income and living conditions (EU-SILC) Survey, the World Health Organization (WHO), the International Agency for Research on Cancer (IARC), the International Atomic Energy Agency (IAEA), the European Society for Paediatric Oncology (SIOPE), the European Union Agency for Fundamental Rights (FRA LGBTIQ), the Health Behaviour in School-aged Children (HBSC) survey as well as from the 2023 Country Health and Cancer Profiles, and other national sources (independent of private or commercial interests). The calculated EU averages are weighted averages of the 27 Member States unless otherwise noted. These EU averages do not include Iceland and Norway. Mortality and incidence rates are age-standardised to the European standard population adopted by Eurostat in 2013.

Purchasing power parity (PPP) is defined as the rate of currency conversion that equalises the purchasing power of different currencies by eliminating the differences in price levels between countries.

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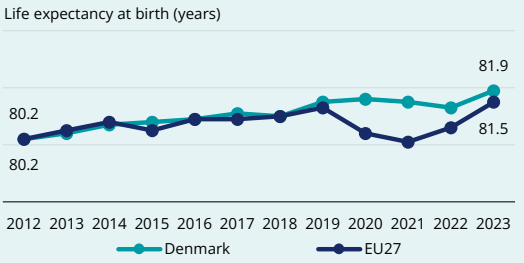
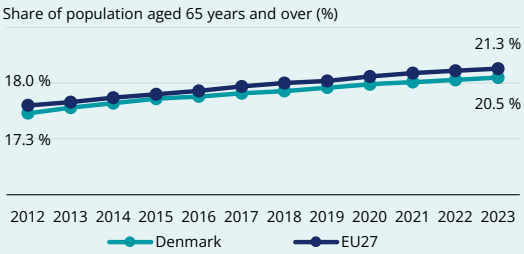
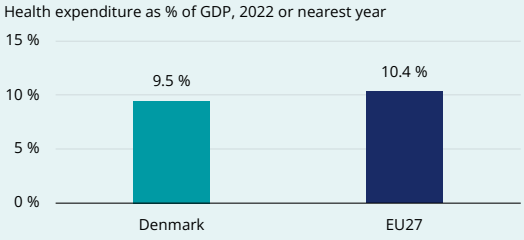
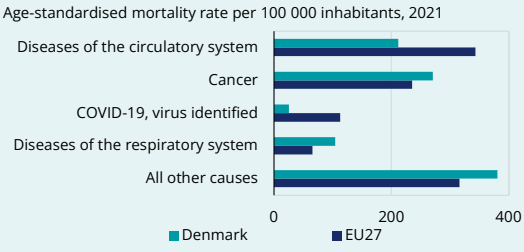


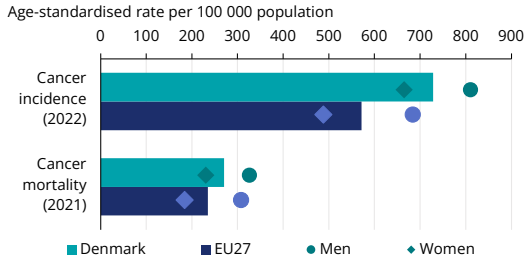






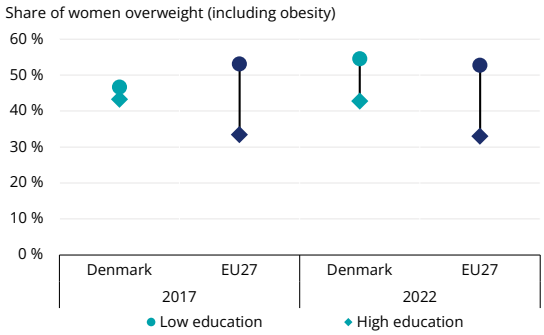
Source: Eurostat Database.

1. Highlights



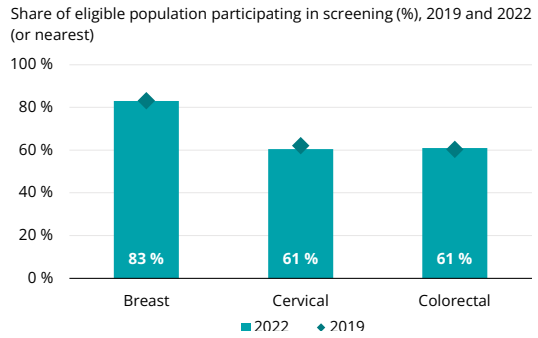
Cancer in Denmark

Estimated cancer incidence and mortality rates in Denmark are higher than the EU averages. The incidence rate increased in Denmark between 2000 and 2021, and the gap between Denmark and most other Nordic countries widened over this period. More positively, cancer mortality rates decreased over the same period. Between 2011 and 2021, the rate decreased by 15% among women and men.



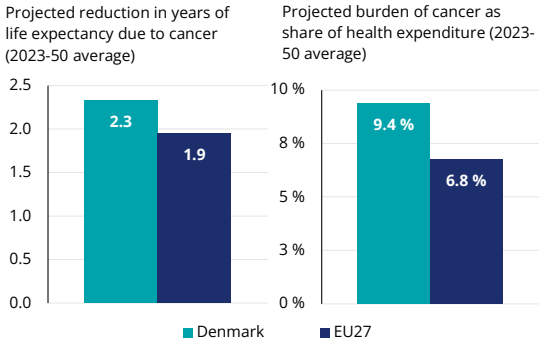
Risk factors and prevention policies

The rate of daily smoking in Denmark fell significantly between 2010 and 2021. However, the obesity rate among adults doubled between 2010 and 2021 to nearly 20%, and alcohol consumption increased by 6% between 2012 and 2021. Cancer risk factors are more common among lower socio-economic groups. Rates of overweight are for example 28% higher among women with lower education levels than higher education levels. Exposure to ultraviolet radiation is also a serious public health issue in Denmark.



Early detection

Denmark has population-based screening programmes for breast, cervical and colorectal cancers. Breast and colorectal cancer screening rates in Denmark are higher than in most other EU countries and Nordic countries. However, the cervical cancer screening rate has decreased over time, and is the lowest among Nordic countries. A lung screening cancer pilot project started in 2024.



Cancer care performance

Four phases of the National Cancer Plan in Denmark have guided successful national efforts to increase cancer care, prevention, access and quality. The density of doctors and nurses specialising in cancer has slightly increased over recent decades, and the radiotherapy equipment rate per capita is higher than in most EU countries. Cancer expenditure per capita is among the highest in the EU, but cancer will continue to take a toll on health system and well-being: it is projected that between 2023 and 2050 cancer will reduce life expectancy in Denmark by an average of 2.3 years compared to a scenario without cancer.

2. Cancer in Denmark

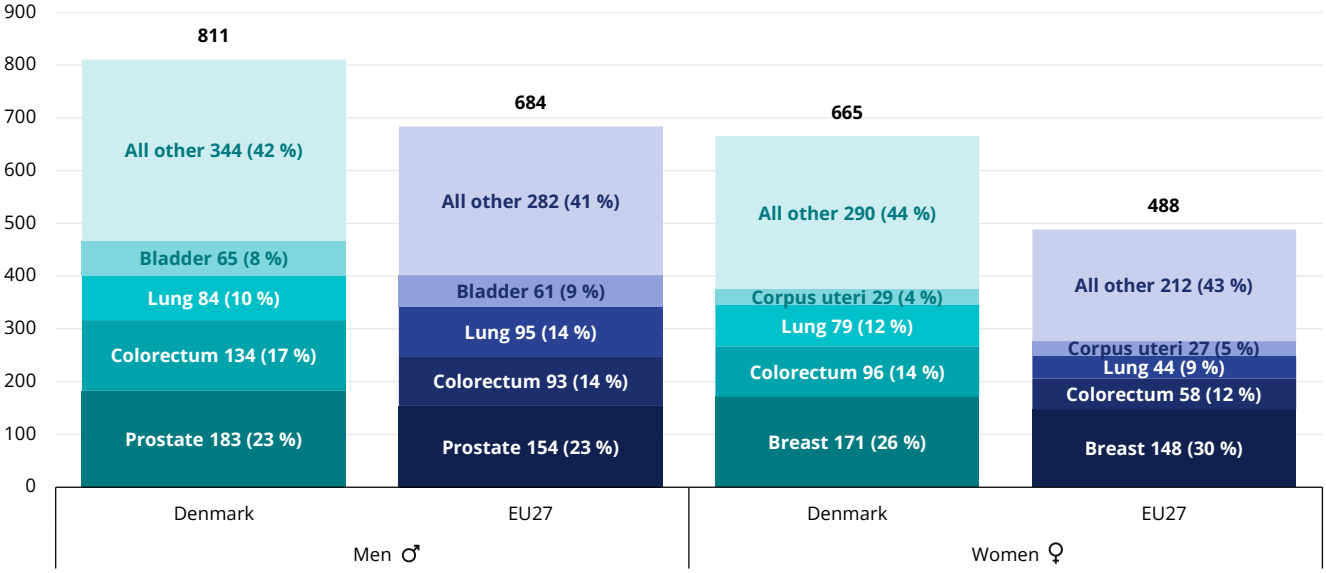
Cancer incidence rates are considerably higher in Denmark than the EU averages

According to the European Cancer Information System (ECIS) of the Joint Research Centre based on incidence trends from pre-pandemic years, around 811 new cancer cases per 100 000 men and 665 new cancer cases per 100 000 women were expected in Denmark in 2022. Age-standardised incidence rates for all cancers were expected to be 20% higher for Danish men and 36% higher for Danish women compared to the EU averages.

The most common cancer types among men are prostate, colorectal and lung cancers[1]; among women, they are breast, colorectal and lung cancers (Figure 1). The increase in the number of new cases is driven by population ageing, the growing size of the population, prevalence of risk factors – such as smoking, alcohol consumption, and overweight and obesity, and improved early diagnosis. Looking forward, ECIS estimates that cancer cases will increase by 18% between 2022 and 2040.

Figure 1. The rates of new cancer cases are considerably higher than the EU averages

Age-standardised incidence rate per 100 000 population, estimates, 2022



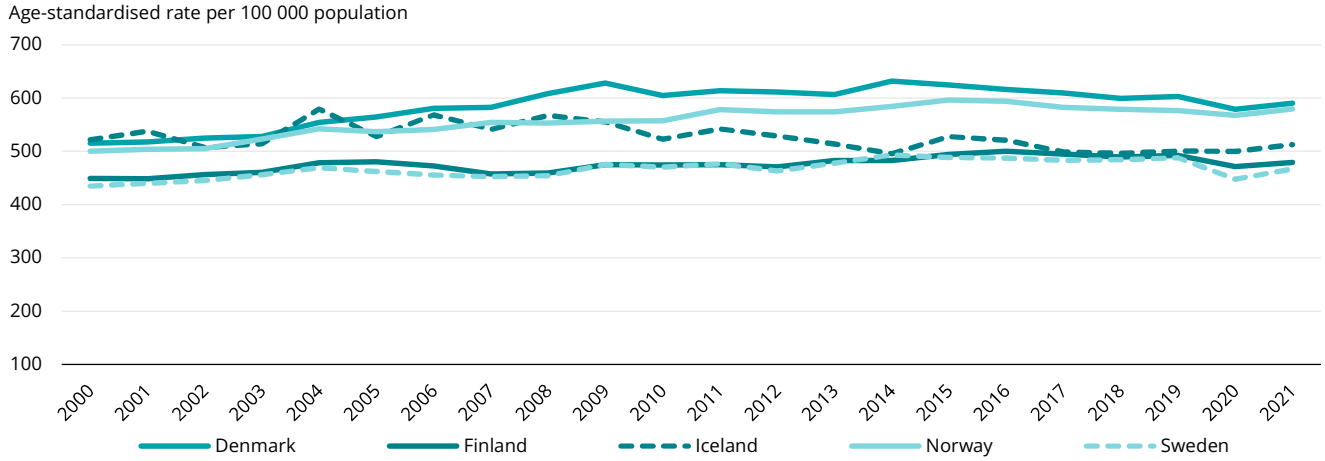
Notes: 2022 figures are estimates based on incidence trends from previous years, and may differ from observed rates in more recent years. Includes all cancer sites except non-melanoma skin cancer. Corpus uteri does not include cancer of the cervix.
Source: European Cancer Information System (ECIS). From https://ecis.jrc.ec.europa.eu, accessed on 10 March 2024. © European Union, 2024. The incidence percentage breakdown was re-computed based on age-standardised incidence rates and as such differs from the percentage breakdown of absolute numbers shown on the ECIS website.

The cancer incidence gap between Denmark and most other Nordic countries has widened since 2005

Since 2005, Denmark has had the highest age-standardised cancer incidence rate among Nordic countries[2] (slightly higher than Norway and much higher than the others). The gap between Denmark and most other Nordic countries widened between 2000 and 2021 (Figure 2). The rates in Denmark rose quickly between 2000 and 2009, before remaining relatively stable until 2014 and then gradually decreasing to 590 per 100 000 population by 2021. Between 2000 and 2021, the incidence rates in Norway gradually rose, while the rates in Finland and Sweden increased at a much slower pace, and the rates in Iceland decreased.

1 *Lung cancer also refers to trachea and bronchus cancers.*
2 *Nordic countries refer to Denmark, Finland, Iceland, Norway and/or Sweden.*

Figure 2. The gap in cancer incidence rates between Denmark and most other Nordic countries slightly widened between 2000 and 2021



Note: Data include all cancers except non-melanoma skin cancer.
Source: Nordic Health and Welfare Statistics (Nordcan) website. From https://nordcan.iarc.fr/en/dataviz.

Risk factors are the main drivers of these high age-standardised cancer incidence rates. Compared to the other Nordic countries over the last 5-10 years, Denmark had higher daily smoking rates, which decreased at a slower rate. Denmark also had higher alcohol consumption, which increased over that same time period, and higher proportions of the population not eating any vegetables and fruit every day, which also increased (see Section 3).

When looking at trends in specific cancer incidence, the age-standardised (melanoma) skin cancer incidence rate more than doubled from 21 to 44 per 100 000 population between 2000 and 2021 (see Section 3). Incidence of skin cancer also increased in the other Nordic countries except Iceland.

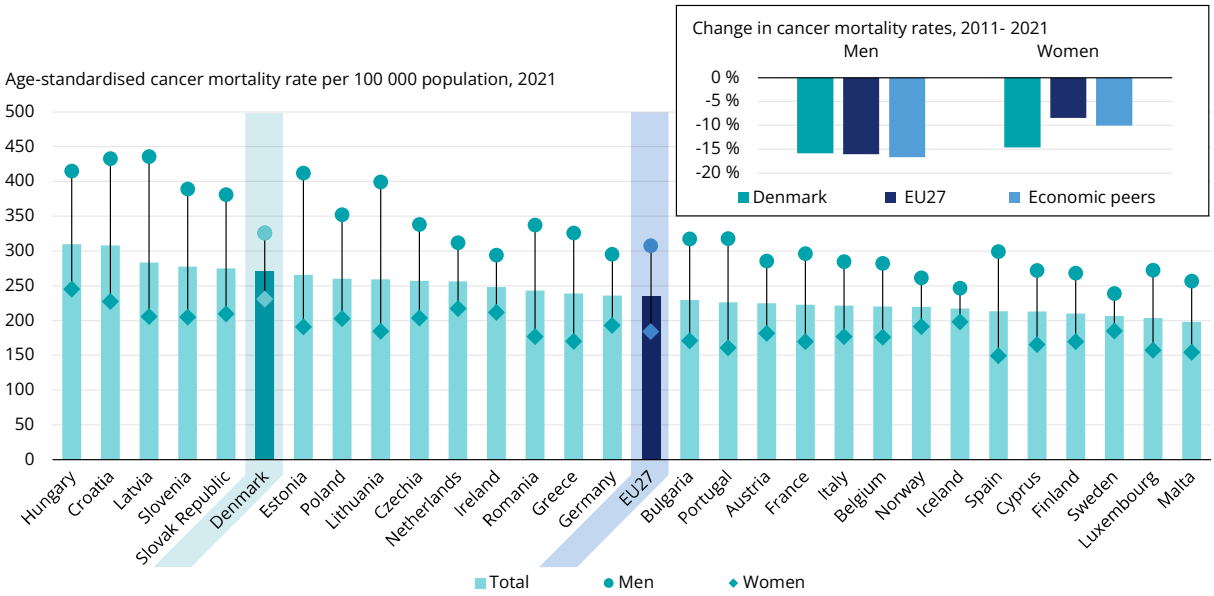
While the lung cancer incidence rate decreased substantially among men in Denmark between 2000 and 2021, as in all the other Nordic countries, it increased among women by over 26% during this period, as in the other Nordic countries except Iceland. Tobacco smoking (including second-hand smoking) is the main cause of lung cancer (see Section 3).

According to Nordic Health and Welfare Statistics (Nordcan), age-standardised incidence rates increased by 33% for prostate cancer, 9% for pancreatic cancer and 8% for breast cancer between 2000 and 2021.

About 16 000 people died from cancer in 2021, accounting for over one in four deaths

In 2021, over 16 000 people died from cancer in Denmark – a mortality rate of 271 per 100 000 population, which is well above the EU average of 235 per 100 000 (Figure 3). In Denmark, as in only few other EU countries (France, the Netherlands and Ireland for example), cancer is the leading cause of death, overtaking circulatory diseases such as heart attacks and stroke. Over one in four deaths (28%) in Denmark in 2021 was due to cancer. While the cancer mortality rate is over 40% higher among men than women, Denmark has the third smallest gender gap among EU countries.

Figure 3. The cancer mortality rate is higher in Denmark than in most other EU countries



Notes: Economic peers are defined as tercile clusters based on 2022 GDP per capita in purchasing power standard terms. Economic peers for DK are AT, BE, DE, IE, IS, LU, NL, NO and SE.
Source: Eurostat Database.

Cancer mortality rates among women have decreased much faster in Denmark than across EU countries on average, while cancer mortality rates among men have decreased at the same pace as the EU average. In the past decade, the overall cancer mortality rate among women has decreased by 15%, compared to an 8.5% EU average decrease, while among men it has decreased by 16% in both Denmark and the EU. Compared to its economic peers[3], the cancer mortality rate for men in Denmark decreased at a similar rate, while the rate for women decreased more rapidly.

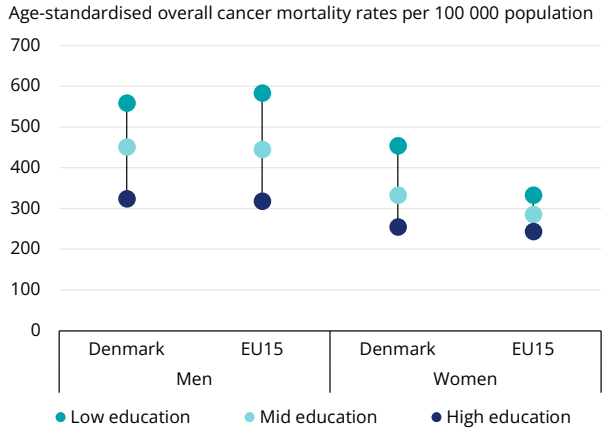
Lung, colorectal and breast cancers were the three leading causes of cancer deaths in Denmark in 2021. Lung cancer mortality accounted for 21% of all cancer deaths, colorectal cancer for 11%, prostate cancer for 8%, and breast and pancreatic cancers for 7% each.

Between 2011 and 2021, mortality rates decreased for almost all these cancers in both men and women. This can be attributed in part to significant therapeutic advances and an increase in early diagnoses (see Sections 4 and 5). However, the death rate for pancreatic cancer increased.

Danes with lower education levels are over 70% more likely to die from cancer than those with higher education levels

Socio-economic inequalities affect not only occurrence of cancer but also its diagnosis and mortality rates. The age-standardised overall cancer mortality rate in Denmark was estimated to be 73% higher among men with lower education levels than those with higher education levels between 2015 and 2019 (Figure 4). This gap is slightly smaller than the EU average. The socio-economic gap is larger among women: age-standardised overall cancer mortality rates are 78% higher among Danish women with lower education levels than among those with higher education levels. This gap is much wider than the EU average.

Figure 4. Education-related inequalities in cancer deaths are larger in Denmark among women than the EU averages



Notes: Data come from the EU-Canlneq study and refer to 2015-19. EU15 refers to unweighted average of 14 EU countries and Norway.
Source: European Commission/IARC/Erasmus MC (2024), Mapping socio-economic inequalities in cancer mortality across European countries. ECIR Inequalities factsheet.

3 *Economic peers are defined as tercile clusters based on 2022 GDP per capita in purchasing power standard terms. Economic peers for DK are AT, BE, DE, IE, IS, LU, NL, NO and SE.*

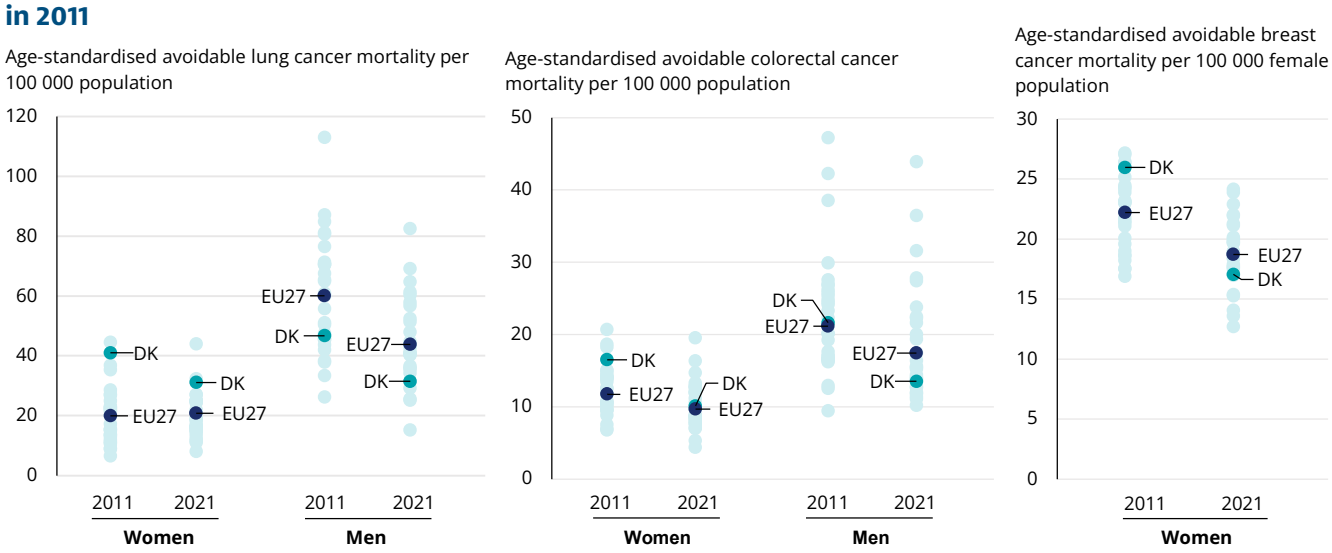
Avoidable mortality from several cancers decreased between 2011 and 2021, suggesting progress in prevention and oncological treatment

Thanks to improved prevention strategies and advances in treatment options, today a significant proportion of cancer deaths in people under 75 years old are considered potentially avoidable – either through public health interventions that minimise exposure to cancer risk factors (preventable cancer mortality) or through the provision of optimal oncological care (treatable cancer mortality).

Denmark had relatively low rates of avoidable mortality[4] from lung cancer, breast and colorectal cancer in 2021 compared to other EU countries, except for lung cancer among women (Figure 5). In line with the general EU-wide trend, Denmark saw a sustained reduction in preventable lung cancer mortality in 2011-21, reflecting the positive impact of tobacco control policies in recent decades. The rate among men declined by a third and by a quarter among women, outpacing the average decline across the EU.

In 2021, Denmark reported a treatable mortality rate from breast cancer of 17 per 100 000 women – 9% lower the EU average. In addition, the treatable mortality rate from colorectal cancer among men was over 20% lower than the EU average, marking a 37% decline over 2011-21. Lower treatable breast and colorectal cancer mortality suggests improved uptake of screening and better provision of oncological cancer care over time – notably through the development of the Danish Comprehensive Cancer Centre (see Section 5.2).

Figure 5. Denmark had fewer avoidable deaths from breast, colorectal and lung cancers in 2021 than in 2011



Note: Avoidable mortality figures relate to deaths of people aged under 75.
Source: Eurostat Database. Data refer to 2021.

Five-year cancer prevalence in Denmark is the highest among EU+2 countries

In 2022, five-year cancer prevalence[5] in Denmark was the highest among EU+2 countries[6], with 2 424 cancer cases per 100 000 people who were diagnosed in the last five years and are still alive (Figure 6).

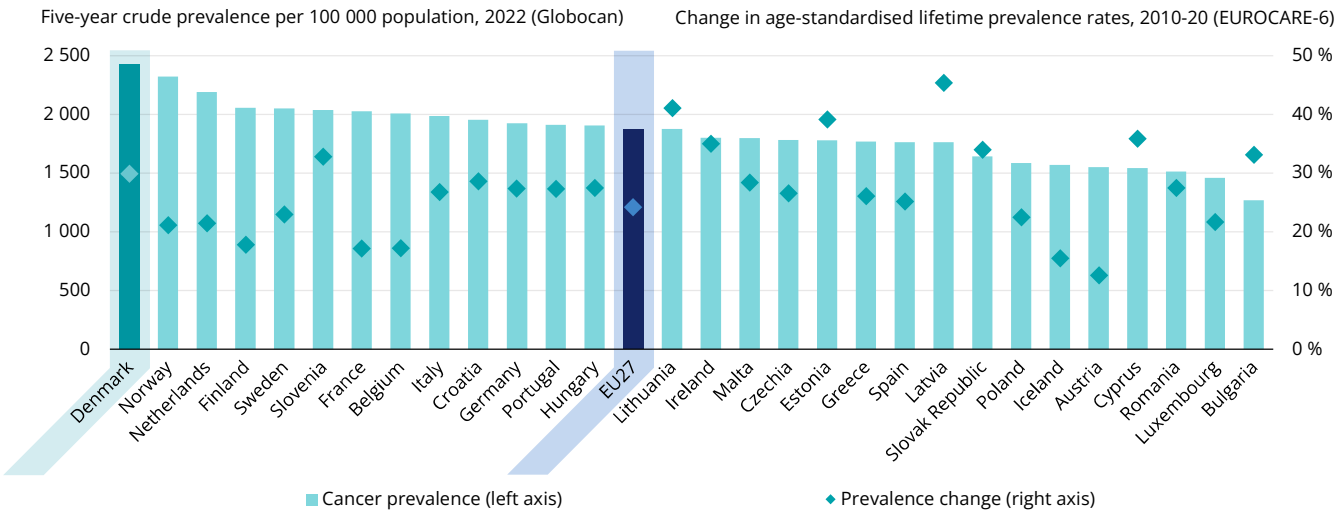
Between 2010 and 2020, lifelong cancer prevalence increased by 30% in Denmark, which is faster than across the EU, where it increased on average by 24%. This rise highlights the growing importance of focusing on quality of life and survivorship (see Section 5.4), as people are living longer with cancer and more people have a history of the disease. This also signals the steep increase in cancer care services that will be needed, which is a challenge given the limited resources.

4 *Avoidable mortality includes both preventable deaths that can be avoided through effective public health and prevention interventions, and treatable deaths that can be avoided through timely and effective healthcare interventions.*

5 *Cancer prevalence refers to the proportion of the population who have been diagnosed with cancer and are still alive, including those currently undergoing treatment for cancer and those who have completed treatment. Five-year cancer prevalence includes people who have been diagnosed within the previous five years, while lifetime prevalence considers those who have ever received a cancer diagnosis.*

6 *EU+2 countries include 27 EU Member States (EU27), plus Iceland and Norway.*

Figure 6. Denmark's five-year cancer prevalence rate is the highest in the EU

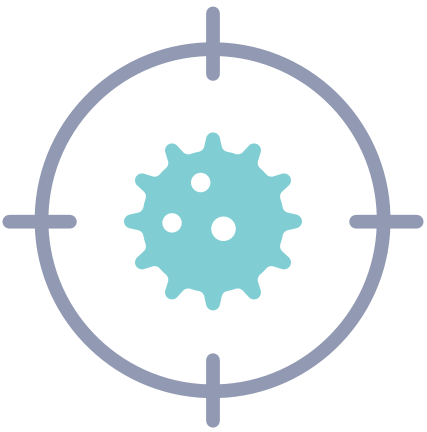


Sources: IARC Globocan Database 2024; EUROCARE-6 study (De Angelis et al., 2024).

The National Cancer Plan has guided Danish cancer efforts since 2000

The Danish Health Authority has launched four phases of the National Cancer Plan since 2000. The initial phase focused on developing an epidemiological evidence base and enhancing national capacity for radiation, surgical and pharmacological cancer treatments. This foundational work, leveraging comprehensive registry data since the inception of the Danish Childhood Cancer Registry in 1985, has significantly advanced cancer research – particularly in paediatric oncology.

Subsequent phases of the Plan, launched in 2005 and 2010, prioritised early screening, rehabilitation and palliative care. These introduced strict timelines for cancer diagnoses, referrals and treatments, enforced by penalties, establishing a tripartite strategy that guarantees swift cancer care for patients. The latest phase of the Plan, initiated in 2016, shifts the focus more towards patient involvement, with an enhanced commitment to smoking prevention and overall patient care (Box 1).



Box 1. The National Cancer Plan is aligned in part with Europe's Beating Cancer Plan

The latest phase of the Danish Cancer Plan prioritises:

- policies to combat tobacco use, minimise radon exposure and improve vaccination rates – particularly for human papillomavirus (HPV)
- policies to enhance participation in screening programmes for breast, cervical and colorectal cancer
- promoting patient participation in treatment decisions, providing information about side-effects, establishing digital tools for cross-sectoral collaboration, promoting home-based treatment, investing in young cancer patient programmes and improving palliative care quality
- improving quality of and access to care for all cancer patients, strengthening rehabilitation programmes, and providing free psychological support.

None of the three transversal themes of the Europe Beating Cancer Plan are main focus areas of the National Cancer Plan (Table 1). The government allocated funds for research and innovation, but the programme was halted owing to technical challenges. Regional disparities hinder treatment access, but national steering committees aim to address this issue. The Danish Childhood Cancer Registry monitors the quality of children's cancer treatment.

Table 1. Denmark's National Cancer Plan aligns in part with Europe's Beating Cancer Plan

Pillars of EBCP				Transversal themes of EBCP		
Prevention	Early Detection	Diagnosis and treatment	Quality of life	Cancer inequalities	Paediatric cancer	Research and innovation
●	●	●	●	●	●	●

Notes: EBCP = Europe's Beating Cancer Plan. Blue indicates that the National Cancer Plan includes a specific section on the topic; orange indicates that the topic is covered in one of the Plan's sections without being the only focus; and pink indicates that this topic is not covered in the Plan.
Source: Adapted from "Study on mapping and evaluating the implementation of the Europe's Beating Cancer Plan" (not yet published).

The Danish Health Authority is preparing the fifth phase of the National Cancer Plan, which is expected to be released in 2025 (Box 2). Compared to the fourth phase, it is expected to focus much more on cancer care than cancer prevention. Implementation will be monitored by the Danish Health Authority's Committee for Cancer and the Task Force for Patient Progression in the Cancer and Heart Area.

In addition, in 2022, the Research Centre of the Danish Cancer Society – a primarily donation-funded national cancer body comprising patient groups, local representatives, volunteers and interdisciplinary professionals – allocated DKK 154.6 million (approximately EUR 20.7 million) to research, mostly in biology and epidemiology (Danish Cancer Society, 2022).

Box 2. The fifth phase of the National Cancer Plan will cover early detection, treatment and life after treatment

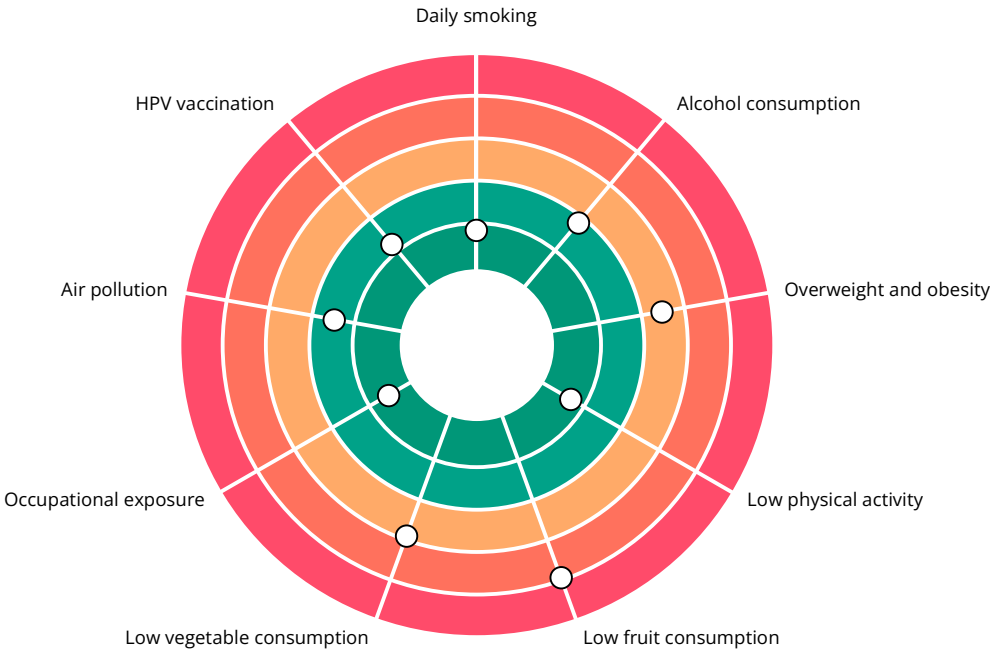
From 2025, the government is expected to allocate DKK 600 million (EUR 80.4 million) annually to the fifth phase of the National Cancer Plan to cover early detection, treatment and life after treatment (Danish Health Authority, 2023). It will focus on quality of life of patients and cancer survivors, including side-effects and late-effects of treatment, rehabilitation and palliative care

3. Risk factors and prevention policies

Nearly one-third (32%) of new cancer cases could be attributed to known risk factors in 2018 (Tybjerg AJ et al., 2022). After tobacco, ultraviolet (UV) exposure is the second most important risk factor for new cancer cases. National strategies and policies aim to create health-promoting environments that strongly encourage lower smoking rates. However, policies on UV exposure (e.g. sunbeds), alcohol consumption and unhealthy food remain lenient. While Denmark performs better than many EU countries on smoking, air pollution and HPV vaccination, occupational exposure to cancer risk factors and physical activity, it ranks lower than most other EU countries on overweight, obesity and diet (Figure 7).

Spending on prevention[7] increased greatly during the pandemic, before decreasing to 5.1% in 2022 – a share still higher than before the pandemic (2.2% in 2019).

Figure 7. Denmark ranks below most other EU countries on overweight and obesity, and diet



Notes: The closer the dot is to the centre, the better the country performs compared to other EU countries. No country is in the white "target area" as there is room for progress in all countries in all areas. Air pollution is measured as particulate matter with a diameter less than 2.5 micrometres ($PM_{2.5}$).
Sources: OECD calculations based on 2022 EU-SILC Survey for overweight, obesity, physical activity, fruit and vegetable consumption (in adults); Eurofound Survey for occupational exposure; OECD Health Statistics for smoking, alcohol consumption (in adults) and air pollution; and WHO for HPV vaccination (15-year-old girls).

Tobacco smoking rates have declined sharply in Denmark

Smoking is the most important risk factor for cancer: about 15% of all new cancer cases could be attributed to tobacco in 2018 (Tybjerg AJ et al., 2022). Over the past two decades, the proportion of daily smokers has fallen considerably in Denmark as a result of tobacco control and prevention policies. The proportion of Danish adults who smoke tobacco daily declined sharply from 21% in 2010 to 12% in 2023. While this rate is lower than the EU average (18%), it remains higher than in other Nordic countries. To curb smoking rates further, a national Tobacco Control Act was adopted in 2020. The price of a pack of cigarettes increased twice, from DKK 40 (EUR 5) to DKK 55 (EUR 7) in 2020, and then to DKK 60 (almost EUR 8)

7 *Prevention expenditures as reported in health accounts should include activities outside of national programmes (e.g. opportunistic cancer screening or counselling for smoking cessation during a routine physician contact), however in practice countries may have difficulty in identifying prevention spending outside of such programmes.*

in 2022. Other recent tobacco control policies included removal of cigarette and e-cigarette visibility at points of purchase in 2021, restrictions on public smoking in 2021 and changes to tobacco product and e-cigarette packaging in 2022. The 2023 Prevention Plan contains further initiatives. Tax on smoke-free nicotine products was raised in June 2024, leading to an average price increase of around DKK 12 (EUR 1.6) per box of 20 nicotine pouches, aligning it more closely with the cost of cigarettes. Additionally, penalties for violations related to tobacco and nicotine products will be increased, and new regulations will be imposed on the use of enticing flavours in tobacco substitutes (Ministry of the Interior and Health, 2023).

A smoke-free youth generation by 2030 is a key objective of Denmark's National Cancer Plan. As a step towards achieving this target, a smoking ban in schools was implemented in 2021. To prevent young people from smoking, the Ministry of Health also proposed in 2022 to ban the sale of cigarettes and nicotine products to any citizens born after 2010, although this plan is yet to be adopted.

Exposure to ultraviolet radiation is a serious public health issue in Denmark

Nearly 6% of all new cancer cases in Denmark could be attributed to UV radiation in 2018, making it the second biggest risk factor after smoking (Tybjerg AJ et al., 2022). Exposure to UV radiation affects many cancers, and especially skin cancer where 90% of cases can be attributed to UV exposure from solar radiation and sun beds (Box 3). Skin cancer incidence rates more than doubled between 2000 and 2021. Denmark currently has one of the highest melanoma skin cancer incidences in the world. Non-melanoma skin cancers, while less lethal, are the most common kinds of cancer in Denmark (Holm AS et al., 2016), and the overall lifetime risk is approximately 22% (Sieborg J et al., 2024).

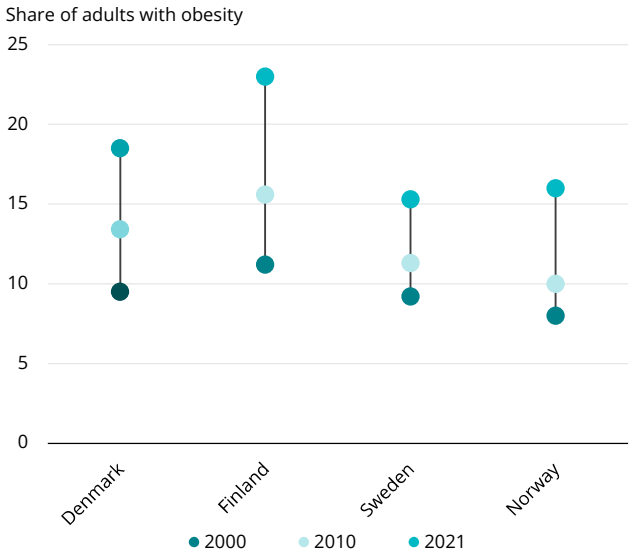
Box 3. Exposure to ultraviolet radiation has a high impact on the rising skin cancer incidence

The majority of Danes have skin types that are not well adapted to high-intensity UV exposure. Frequent information campaigns regarding sun protection are therefore highly important. Although there is no safe limit for exposure to UV radiation from sunbeds (SCHEER, 2016), Denmark does not restrict the intensity of UV radiation of sunbeds, except when above the EU maximum erythemal irradiance of 0.3 W/m^2, which corresponds to an UV Index of 12. Furthermore, sunbeds are not illegal for people under 18 years, unlike in many EU countries. A large study found that 22% of Danish students aged 15-25 had used sunbeds in the last 12 months in 2014 (Hagelskær Meyer MK et al., 2017); another study showed that 13% of users were aged 12-14 in 2008 (Krarup AF et al., 2011). More recently, a 2022 survey indicated that 23% of 15-19 year-old Danes had used a sunbed once or more (Kraeftens Bekaempelse, 2023). WHO estimates a 75% increase in the lifetime risk of skin cancer among people who use tanning beds before the age of 30. More positively, the five-year survival rate from skin cancer was above 96% in 2017-21 in Denmark.

Obesity rates among adults nearly doubled between 2000 and 2021 in Denmark

According to the Institute for Health Metrics and Evaluation, 8% of all cancer deaths and 9% of all deaths could be attributed to dietary risks in 2021 in Denmark. Unhealthy eating is one of the primary causes of overweight and obesity. Almost one in five Danish adults (19%) were obese in 2022 – a share that has gradually increased from 10% in 2000 and is higher than in most other Nordic countries (except Finland) (Figure 8). In addition, 55% of the Danish population aged 18 and over was overweight, a higher rate than the EU average (51%).

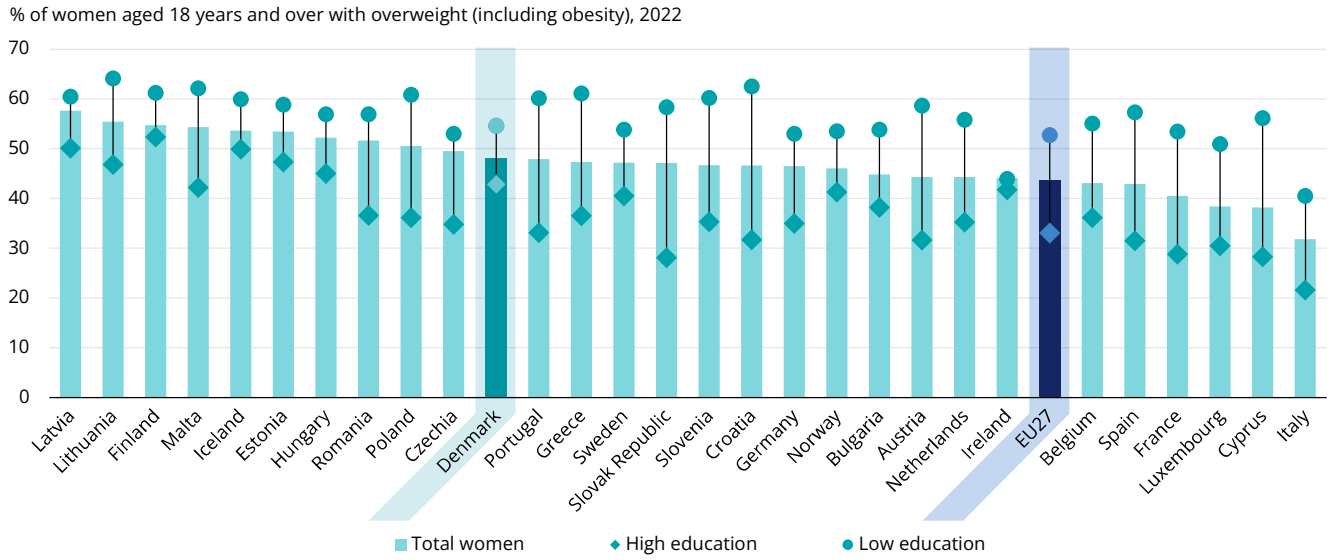
Figure 8. Obesity rates among adults in Denmark almost doubled from 2000 to 2021



Notes: Obesity rates are self-reported. Data for Finland are from 2020 instead of 2021. Data for Norway are from 2002, 2012 and 2022.
Source: OECD Health Statistics 2024.

This rising trend in overweight and obesity is connected to increasing prevalence of overweight among men and women, which varies by education level. For instance, in 2022, prevalence of overweight (including obesity) among adult Danish women was 48% – higher than the EU average of 44% (Figure 9). As in nearly all EU countries, rates of overweight in Denmark were significantly higher among women with lower education levels (55%) than higher education levels (43%). Among women with lower education levels, prevalence of overweight increased by nearly 17% between 2017 and 2022, while it decreased slightly across the EU (-0.8%).

Figure 9. The education gap in overweight and obesity is lower in Denmark than in the EU



Note: Overweight (including obesity) includes those with a body mass index above 25.
Source: Eurostat Database.

Poor nutrition is one reason for overweight and obesity. About 45% of adults reported not eating at least one portion of vegetables a day in 2022 – a share slightly worse than the EU average (40%); and 52% of adults reported not eating at least one portion of fruit a day – a share also worse than the EU average (39%). About 90% of Danes did not meet the Danish Food Administration's recommended fruit and vegetable intake of 600 g per day in 2019. However, in 2022, 60% of Danes aged over 15 engaged in physical activity at least three times per week – double the EU average (31%).

Denmark adopted the Keyhole food label in 2009 as part of a joint Nordic initiative with Norway and Sweden. The label, which was originally introduced in Sweden in 1989, aims to help consumers make healthier food choices by identifying products that meet specific criteria for salt, sugar, fat and fibre content. However, Denmark does not have taxes on sugar-sweetened beverages, unlike Finland, Norway and seven other EU countries.[8]

Alcohol consumption has increased and is now much higher than in the other Nordic countries

Alcohol consumption significantly increases the risk of breast, colorectal and several other cancers. More than one in three Danish adults (37%) reported regular heavy drinking in 2019 – the highest proportion in the EU.[9] However, the volume of alcohol consumption in Denmark was closer to the EU average in 2022 (10 litres of alcohol per person per year) than in the other Nordic countries (where the average was 7 litres).

The 2023 Prevention Plan includes the initiative of prohibiting 16- to 17-year-olds from purchasing beverages with a strength exceeding 6% alcohol. This means that while sales of beer will still be allowed, sales of wine will be prohibited (Ministry of the Interior and Health, 2023).

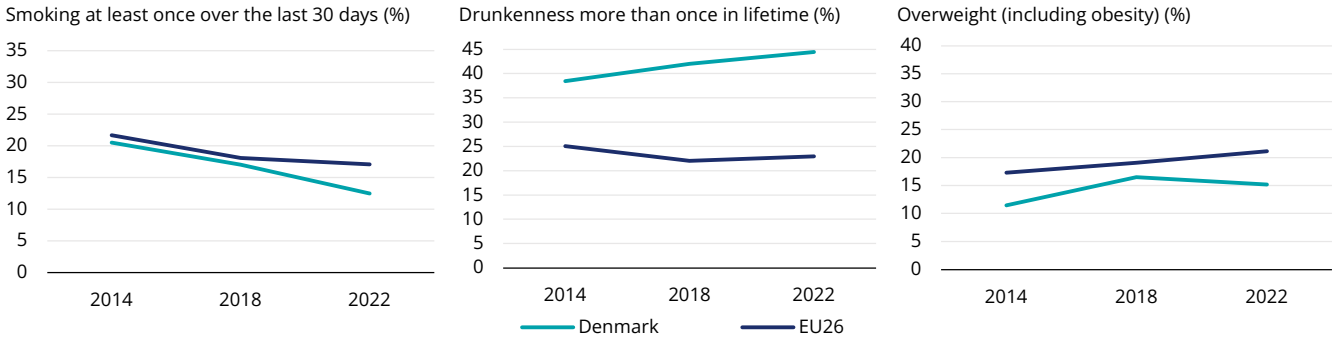
Smoking rates decreased, but rates of alcohol consumption and obesity increased among Danish adolescents

Smoking rates among adolescents decreased substantially between 2014 and 2022 (Figure 10). They are now lower in Denmark than in most other EU countries, while remaining high compared to

8 *Countries include Belgium, Finland, France, Hungary, Ireland, Latvia, Norway, Portugal and Spain.*
9 *Heavy drinking is defined as consuming six or more alcohol drinks on a single occasion for adults.*

other Nordic countries. In 2022, 13% of Danish 15-year-olds reported that they had smoked cigarettes in the past month, compared to 22% in 2014. However, tobacco and nicotine products other than traditional cigarettes have become more popular in recent years, especially among minor and young adults. About 12% of 1-year-olds reported regular use of e-cigarettes in 2022, approximately 9.8 percentage points lower than the EU average.

Figure 10. Smoking rates decreased, but alcohol consumption and overweight increased among 15-year-olds between 2014 and 2022



Notes: The EU average is unweighted. Data refer to 2022, and are based on children aged 15 years. EU26 for smoking and drunkenness; EU25 for overweight.
Source: Health Behaviour in School-aged Children Survey.

No recent progress has been achieved in tackling alcohol consumption among adolescents. In 2022, 45% of Danish 15-year-olds reported that they had been drunk more than once in their life – the highest proportion among all EU countries. This share had increased from 39% in 2014. Denmark is one of the five countries in the EU where people are permitted to buy certain types of alcohol, such as beer, from the age of 16, compared to 18 in the majority of EU countries, including all the other Nordic countries. Over 15% of 15-year-olds were overweight in 2022 – up from 12% in 2014 – but that rate remained below the EU average of 21%. In addition, cancer risk factors among adolescents in Denmark show socio-economic inequalities. The socio-economic gap – based on the Family Affluence Scale in overweight and obesity rates is 13.5 percentage points, compared to 10.9 percentage points on average across the EU.

In 2022, 15% of Danish 15-year-olds were overweight or obese, much lower than the EU average of 21%. This rate had increased by 4 percentage points during 2014-22. However, among 15-year-olds in Denmark, 29% consumed fruit consumption daily (compared to 30% in the EU on average) and 42% consumed vegetables daily (compared to 34% in the EU). The share of 15-year-olds engaging in 60 minutes of physical activity daily in Denmark is also close to the EU average – at 15%.

Denmark's human papillomavirus vaccination coverage is much higher than the EU average

HPV infections can lead to cancers, the most common of which is cervical cancer. Vaccination against HPV prevents up to 90% of HPV infections that cause cancer. In Denmark, HPV vaccination coverage is much higher than the EU average for both boys and girls, but below the coverage rates in some Nordic countries. In 2023, the proportion of girls who received all recommended doses of the HPV vaccine by age 15 in 2023 was 83% in Denmark, compared to 64% on average in the EU. For boys, this figure stood at 80%.

National bodies have increased vaccination efforts by expanding coverage and increasing reminders. HPV vaccination has been part of the standard programme at the age of 12 for girls since 2009 and for boys since 2019. Parents begin receiving vaccination reminders two weeks before their child turns 12. In addition, there have been several catch-up programmes offering HPV vaccination free of charge. The programmes have included girls and women born in 1985 or later, boys and men born in 2006 and later and the group of MSM born in 1994 or later. HPV vaccination sites were introduced in schools in Copenhagen between 2021 and 2024 and a few other municipalities, aiming to improve uptake.

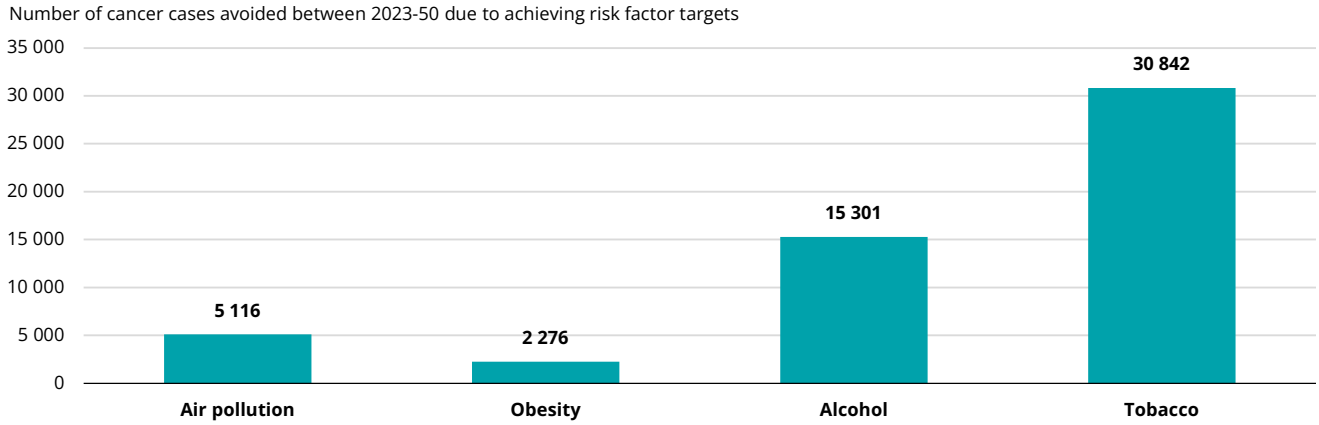
Exposure to air pollution and occupational exposure in Denmark are lower than the EU average

In 2020, mean exposure to $PM_{2.5}$ was estimated at about 9 µg/m³, which is lower than the EU average (12 µg/m³). Nearly 20% of workers reported occupational exposure to chemical products or substances in 2021 – a share below other EU+2 countries. Men reported higher exposure (21%) than women (18%).

Denmark could prevent thousands of new cancer cases between 2023 and 2050 by focusing on primary prevention

According to OECD Strategic Public Health Planning (SPHeP) modelling work, like all countries in Europe, Denmark could substantially reduce new cancer cases by focusing on primary prevention. The largest potential reduction in cancer cases between 2023 and 2050 would come from meeting tobacco reduction targets, with an estimated 30 842 cases avoided (Figure 11). Meeting alcohol targets could further reduce the cancer burden by about 15 301 cases during this period. Reducing other risk factors would also have a significant impact: air pollution could prevent 5 116 cases, while targeting obesity could result in a reduction of around 2 276 cancer cases.

Figure 11. New cancer cases could be prevented in the coming years by reducing the prevalence of tobacco, alcohol, obesity and air pollution



Notes: The target for tobacco is a 30% reduction in tobacco use between 2010 and 2025, and less than 5% of the population using tobacco by 2040. For alcohol, the target is a reduction of at least 20% in overall alcohol consumption and a 20% reduction in heavy drinking (six or more alcoholic drinks on a single occasion for adults) between 2010 and 2030. For air pollution, it is an annual average $PM_{2.5}$ level capped at 10 µg/m³ by 2030 and at 5 µg/m³ by 2050. For obesity, the target is a reduction to the 2010 obesity level by 2025.
Source: OECD (2024b), Tackling the Impact of Cancer on Health, the Economy and Society, https://doi.org/10.1787/85e7c3ba-en.

4. Early detection

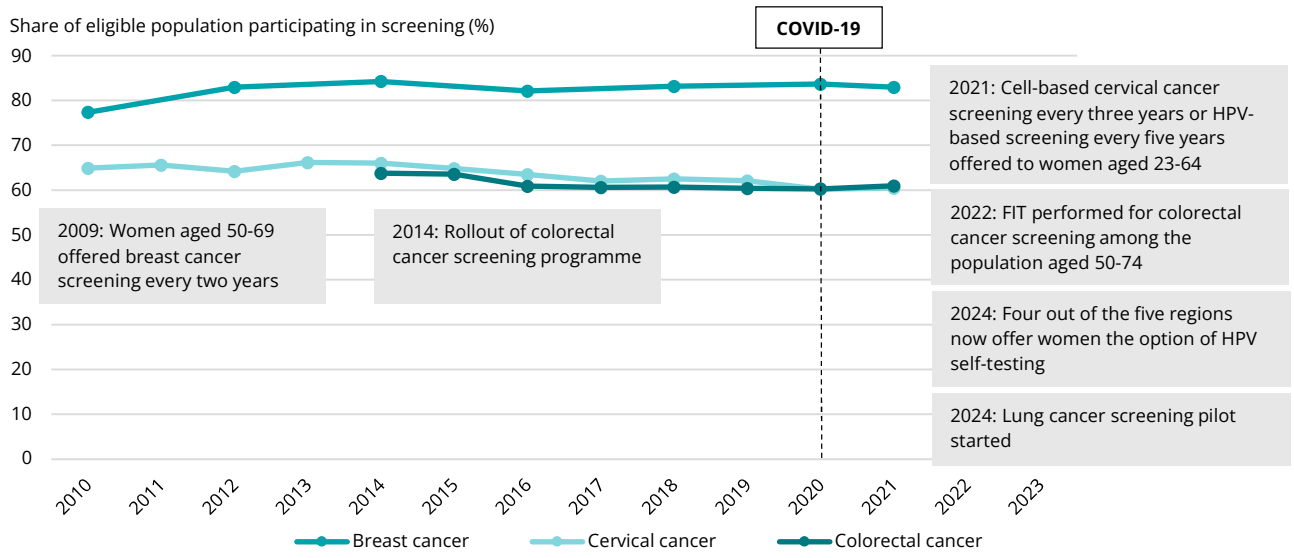
In Denmark, there are population-based screening programmes for breast, cervical and colorectal cancers. Cancer screening is co-ordinated nationally and executed regionally, using the digital Civil Registration System. Automated screening reminders are sent through e-Boks, the national digital mailbox, with detailed participation instructions. Depending on the type of screening, it is conducted by either the regional hospital centre or a general practitioner (GP) or at home (colorectal cancer screening, cervical cancer screening after second reminder). Once completed, the screening data are archived in the Central Person Registry, which holds an extensive collection of healthcare information that supports research and aids in sending future screening reminders.

Breast cancer screening rates in Denmark are the highest among Nordic countries

Since 2009, Danish women aged 50-69 have been offered breast cancer screening every two years. Eligible women receive an initial invitation, followed by up to two reminders if they do not respond. Women can opt out of receiving further invitations by informing the regional screening office.

Breast cancer screening rates in Denmark are above the EU average and higher than in other Nordic countries. In 2021, 83% of all Danish women aged 50-69 had had a mammogram in the past two years – up from 77% in 2010 (Figure 12). In comparison, the rate was 56% across EU countries in 2022, 81% in Sweden, 82% in Finland, 76% in Norway in 2021 and 56% in Iceland in 2023.

Figure 12. Screening uptake is over 80% for breast cancer, but around 60% for cervical and colorectal cancers



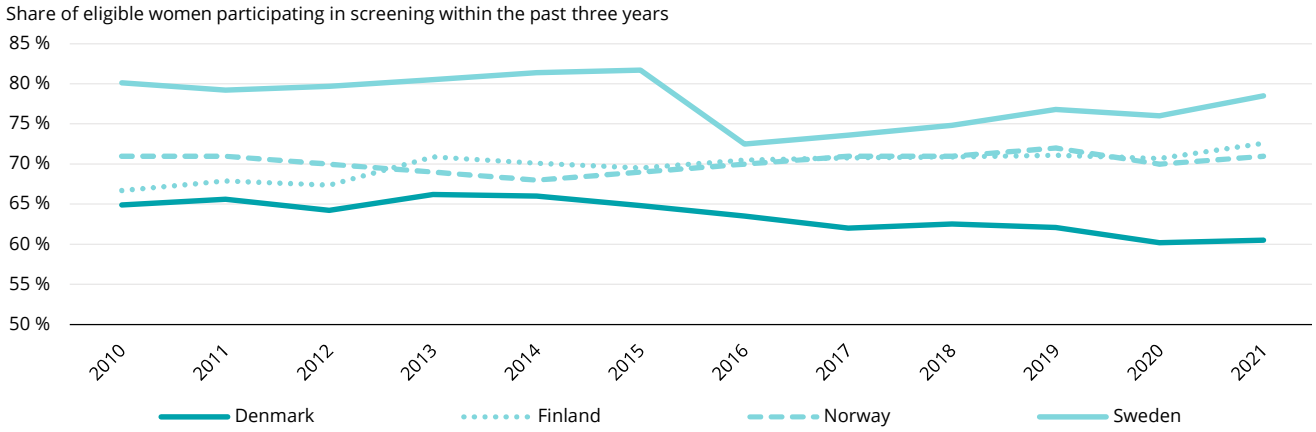
Notes: FIT = faecal immunochemical testing. Data refer to mammography screening among women aged 50-69 within the past two years (based on programme data), cervical cancer screening among women aged 30-64 within the past three years (based on programme data) and colorectal cancer screening among people aged 50-74 over the past two years (based on programme data).
Source: OECD Health Statistics 2024.

Cervical cancer screening uptake in Denmark is the lowest among Nordic countries, and has decreased slightly since 2010

Women aged 23-64 are offered cervical cancer screening at regular intervals. Recent guideline changes incorporate international and national evidence supporting the effectiveness of HPV-based screening for cervical cancer.

Cervical cancer screening participation uptake decreased slightly from 65% in 2010 to 60% in 2020, before increasing slightly to 61% in 2022. This rate is lower than in the other Nordic countries, and is now well below the EU target of 70% as part of Europe's Beating Cancer Plan (Figure 13).

Figure 13. Cervical cancer screening rates in Denmark are the lowest among the Nordic countries, and have declined slightly since 2010



Notes: Participation rates are based on screening within the past three years, or according to the specific screening frequency recommended in each country. Programme data are collected from national and regional cancer databases and registries.
Source: OECD Health Statistics 2024.

Since 2021, Denmark has introduced a differentiated cervical cancer screening strategy to evaluate both the health effects and adverse impacts of alternative screening methods. For women aged 30-49 years, the schedule includes cytology every three years, or an HPV test every five years, while women aged 50-59 years are offered either cytology or an HPV test every five years. For women aged 60-64 years, an "exit" HPV DNA test is conducted and continuous surveillance is provided for HPV-positive women. Initial evaluation results favour a transition to a full HPV-based screening programme for women aged 30-59 years.

By June 2024, four out of the five regions in Denmark had started offering women the option to choose HPV self-sampling as part of their screening programme. This self-sampling option is offered in a follow-up reminder if they do not respond to the first invitation. The Capital Region of Denmark evaluated self-sampling to quantify how much it increased participation among non-responders. It offered HPV self-sampling to 57 717 non-attending women in 2017-18. Of those invited, 27% opted in, 17% returned the kits and 14% underwent regular clinician-collected screening, resulting in a total screening rate of 31% (Ejegod DM et al., 2022).

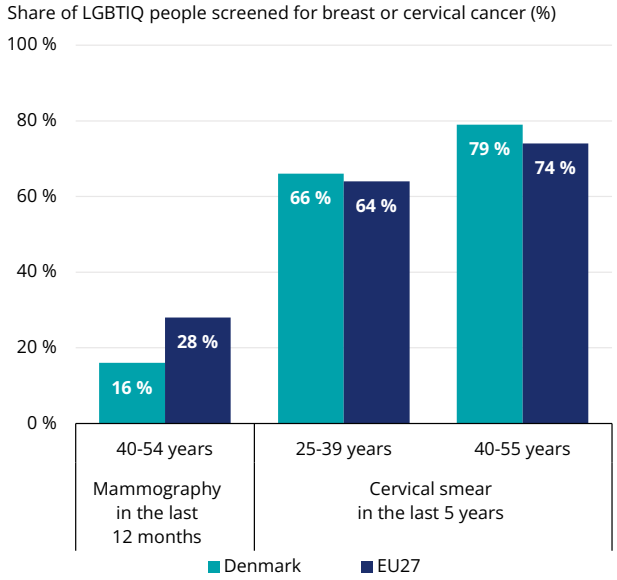
Screening uptake differs across population groups and by region in Denmark

People with lower socio-economic status are less likely to participate in screening programmes, even though these are free of charge. For example, a study that covered nearly 2 million Danish people between 2014 and 2017 showed that the richest quartile of the population was 42% more likely to participate in colorectal screening than the poorest quartile, all else being equal (Pallesen AVJ et al., 2021).

According to registry data from 2016-18, the participation rate in the Danish breast cancer screening programme was 78% among women with lower education levels, compared with 83% among women with higher education levels. Further, the participation rate for cervical cancer screening in 2017 was 55% among women with lower education levels, compared to 73% among women with higher education levels.

In addition, the EU LGBTIQ Survey III suggests that participation in breast cancer screening among LGBTIQ persons is lower in Denmark than in other EU countries. In 2023, 16% of LGBTIQ cisgender females, trans women and intersex people aged 40-54 years reported having had a mammogram in the previous 12 months, much lower than the EU average of 28% (Figure 14). This does not align with the relatively high breast cancer screening rates seen in Denmark in the general population as compared with the EU. For cervical cancer screening, 66% of the relevant LGBTIQ population aged 25-39 in Denmark reported having had a smear test in the previous 5 years (higher than the 64% in the EU), while 79% of those aged 40-55 in Denmark reported a smear test (higher than the 74% in the EU).

Figure 14. LGBTIQ persons in Denmark participate more in cervical cancer screening than their counterparts in the EU



Note: LGBTIQ survey results refer to age groups and/or screening intervals that do not align with the population screening approach in EU countries, and should not be compared.
Source: The European Union Agency for Fundamental Rights (EU LGBTIQ Survey III).

Colorectal cancer screening rates in Denmark are the fourth highest in the EU

Since 2014, all individuals in Denmark between the ages of 50 and 74 have been eligible for colorectal cancer screening. In 2022, the clinical guidelines for managing detected cancers were updated in accordance with latest advances, including in rehabilitation and palliative care, and Denmark provides faecal immunochemical testing (FIT) for colorectal cancer screening to the population aged 50-74.

Invitation letters are sent with screening kits, which are returned to the laboratories. A positive FIT result is followed by an invitation for a colonoscopy with a pre-booked time within 14 days of the result.

In 2021, based on programme data, 61% of Danes aged 50-74 reported having had colorectal cancer screening in the past two years – down from 64% in 2014. This uptake rate is among the highest in the EU after Finland (77%), the Netherlands (68%) and Sweden (64%) in 2022. The gender gap in screening uptake in Denmark is small.

A lung cancer screening pilot project started in 2024

Lung cancer screening programmes are not currently in place in Denmark, but have been suggested by the Danish Cancer Society in the form of low-dose computed tomography (CT) scanning. The Society recommends undertaking analyses and pilot projects to estimate the cost – effectiveness of lung cancer screening programmes. It also recommends that routine screening should be targeted at high-risk groups, and that smoking cessation interventions should be offered. A pilot project at Odense University Hospital in the region of southern Denmark started in 2024 (2024-26) to generate better understanding of how to implement a nationwide screening programme, including use of artificial intelligence.

5. Cancer care performance

5.1 Accessibility

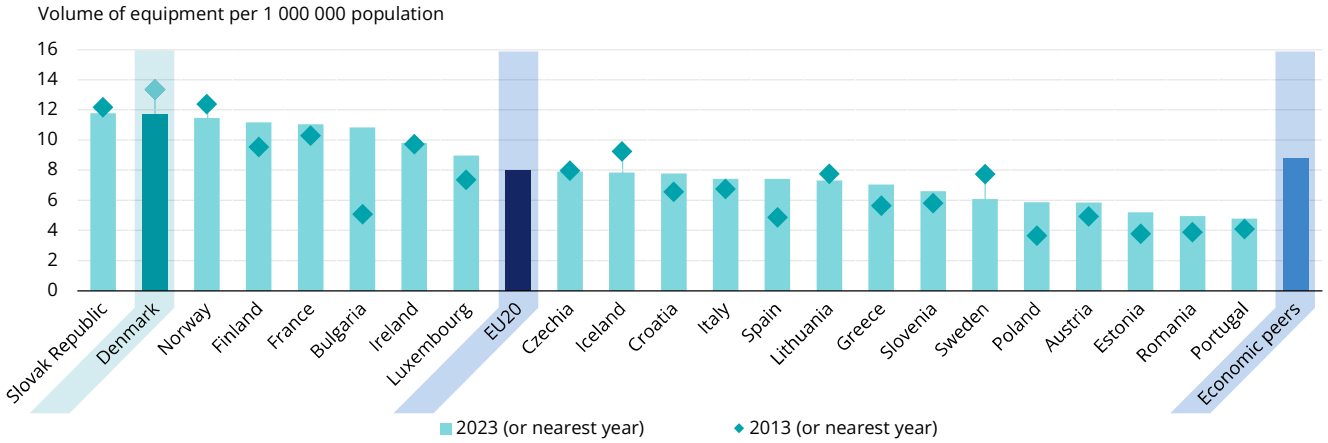
Denmark provides universal health coverage, primarily funded through state-level taxes and managed by its five regions. The majority of healthcare expenses are covered by public insurance, ensuring that all legally resident Danes have access to healthcare, which significantly reduces unmet medical needs. In 2021, the Health Clusters Agreement was established between the government, regions and municipalities to create health clusters around the 21 acute hospitals, aiming to facilitate collaboration across hospitals, primary and local care. New collaborative governance fora were set up in the five regions. In 2022, the Health Reform Package allocated DKK 4 billion (EUR 536.4 million) to establishing local hospitals, and made further investments in municipal healthcare, along with developing quality targets and indicators at the municipal level. Despite these advances, the healthcare system faces challenges such as fragmented care delivery and complex co-ordination between hospitals and primary healthcare services.

Denmark has one of the highest numbers of radiation therapy units per capita

In 2022, the number of radiation therapy units in hospitals and the ambulatory sector was 12 per 1 000 000 inhabitants, which is the second highest among EU countries with available data and 33% higher the average among its economic peers (Figure 15). While this number grew sharply in 2007-08 following administrative reforms to the healthcare system, the rate decreased very slightly afterward.

In 2024, Denmark had nine radiation therapy centres: two each in the capital region of Denmark, the region of southern Denmark, and the central Denmark region, and one each in region Zealand and the north Denmark region. Proton ion therapy is only available in Aarhus at the Danish centre for particle therapy, in the central Denmark region. Of the 72 particle therapy units, one-third is under 5 years old.

Figure 15. Denmark has the second highest number of radiation units per capita in the EU

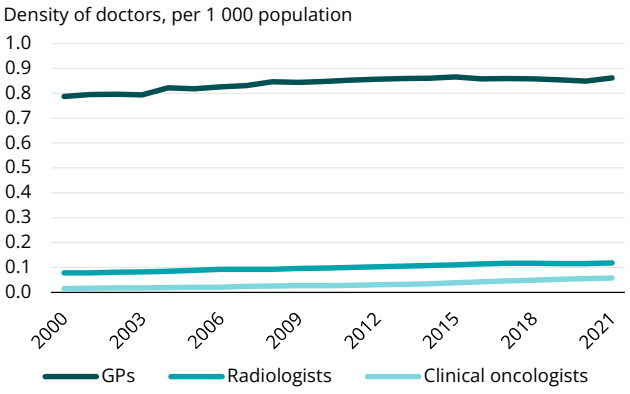


Notes: The vast majority of radiotherapy equipment in EU countries is found in hospitals. Data for Portugal and France includes equipment in hospitals only while data for other countries refer to all equipment. Economic peers are defined as tercile clusters based on 2022 GDP per capita in purchasing power standard terms. Economic peers for DK are AT, IE, IS, LU, NO and SE. The EU average is unweighted.
Source: OECD Health Statistics 2024.

The densities of cancer care specialists increased very slightly between 2000 and 2021

GPs are often the first point of contact of patients, while oncologists and radiologists are the two main specialties most involved in cancer care. The number of GPs in Denmark increased from 4 201 in 2000 to 5 301 in 2021, while the number of clinical oncologists rose from 84 in 2000 to 338 in 2021 – a three-fold increase. Over the same period, the number of radiologists grew from 418 to 695 – a 66% increase. Given the important increase in population size over that period, however, the density of these three specialities increased only very slightly (Figure 16). While Denmark did not report a shortage of oncologists, the country reported shortages of GPs and radiologists in 2023 (OECD, 2024a).

Figure 16. The densities of GPs, oncologists and radiologists have increased only very slightly



Source: Bevægelsesregisteret [Registry of movement], https://www.esundhed.dk/Registre/Bevaegelsesregisteret.

In Denmark, the public debate has mostly focused on the shortage of GPs in recent years. As part of the Health Reform Package announced in spring 2022, the number of GP training positions was increased to boost supply and respond to growing demands in primary care, although the effect will only be felt in about a decade.

The number of advanced practice nurses in cancer care is increasing, but the overall density of nurses has been stable since 2010

Nurses are also crucial in providing cancer care. In the early 2000s, Denmark created a conceptual competence framework to develop a new position of advanced practice nurse, including in cancer care. Legislation was instituted for various advanced practice nurses specialisations over the following years, all requiring postgraduate nurse training with 30-78 weeks of on-the-job training and at least 2 years of clinical practice. Cancer care and community-based care were two of the seven specialisations for advanced practice nurses in 2024.

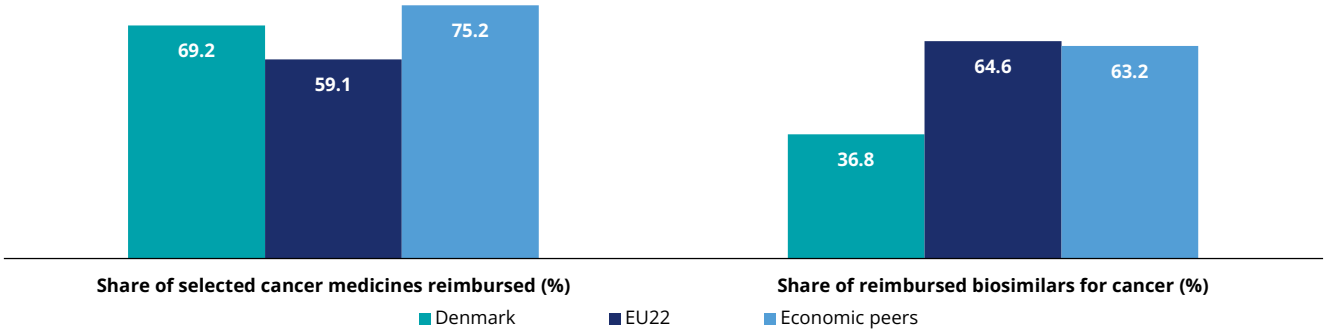
The number of oncologist nurses quadrupled from 70 in 2010 to 290 in 2021. The number of community-care advanced practice nurses – a more recent specialisation – jumped from 99 in 2019 to 274 in 2021. However, evidence demonstrates that Denmark faces a shortage of nurses. In 2022, around 4 700 nursing positions were unfilled, mostly in hospitals. Since 2019, there has been a large net departure of nurses towards advanced practice, and from regional hospitals to the municipal health sector (Birk HO et al., eds., 2024).

Denmark has a relatively low public coverage rate for biosimilars in cancer

Denmark has a high-functioning generics market. The place of new oncology drugs in therapy is dictated by clinical guidelines, but where therapies show similar effectiveness, medicines with the lowest cost are promoted, especially since the establishment of the Danish Medicines Council in 2017.

The proportion of indications among a sample comprising 10 new cancer medicines for breast and lung cancers with high clinical benefit that are publicly reimbursed/covered suggests that public coverage for some new drugs with high clinical benefits is higher in Denmark (69%) than the EU average (59%), but lower than in its economic peers (75%; Figure 17). However, in 2021, the share of a sample of biosimilars for cancer medicines with public reimbursement/coverage was 37%, which is lower than the averages across the EU and among its economic peers.

Figure 17. Public coverage is relatively low for biosimilars for cancer in Denmark



Notes: The analysis includes a sample of 13 indications of 10 new cancer medicines for breast and lung cancer with a high clinical benefit and 19 biosimilars of three cancer medicines (bevacizumab, rituximab, trastuzumab), with active marketing authorisation by the European Medicines Agency as of 26 March 2023. The data represent the share of the indications or biosimilars that were on the public reimbursement list on 1 April 2023. Economic peers are defined as tercile clusters based on 2022 GDP per capita in purchasing power standard terms. Economic peers for DK are AT, BE, DE, IE, IS, NL, NO and SE. The EU average is unweighted.
Source: Hofmarcher, Berchet and Dedet (2024), "Access to oncology medicines in EU and OECD countries", https://doi.org/10.1787/c263c014-en.

In 2021, the Danish Health Technology Council was established to complement the existing efforts of the Danish Medicines Council (established in 2017). The Danish Health Technology Council is responsible for assessing and recommending new health technologies for use in the Danish healthcare system, while the Danish Medicines Council provides guidance about new medicines for use in the Danish hospital sector.

While inpatient and outpatient cancer care is free at the point of care in Denmark, adults face a DKK 1 075 (about EUR 144) threshold for self-administered pharmaceuticals, after which costs are covered by copayment. Children and adolescents under 18 benefit from more favourable copayment, with 60% of costs reimbursed starting from the first DKK 1 075. Any annual personal expenditure on reimbursable medicine exceeding DKK 21 298 (about EUR 2 856) for adults or DKK 26 085 (about EUR 3 498) for those under 18 is fully reimbursed, subject to a fixed patient co-payment of DKK 4 575 (EUR 613).

In 2022, government or compulsory insurance schemes in Denmark covered only 40% of pharmaceutical spending, which is lower than in Norway (53%), Sweden (56%) and Finland

(59%). Additionally, there are no exemptions for out-of-pocket payments for cancer patients in Denmark, potentially leading to inequalities in cancer medicine and biosimilar accessibility and in the financial burden on patients.

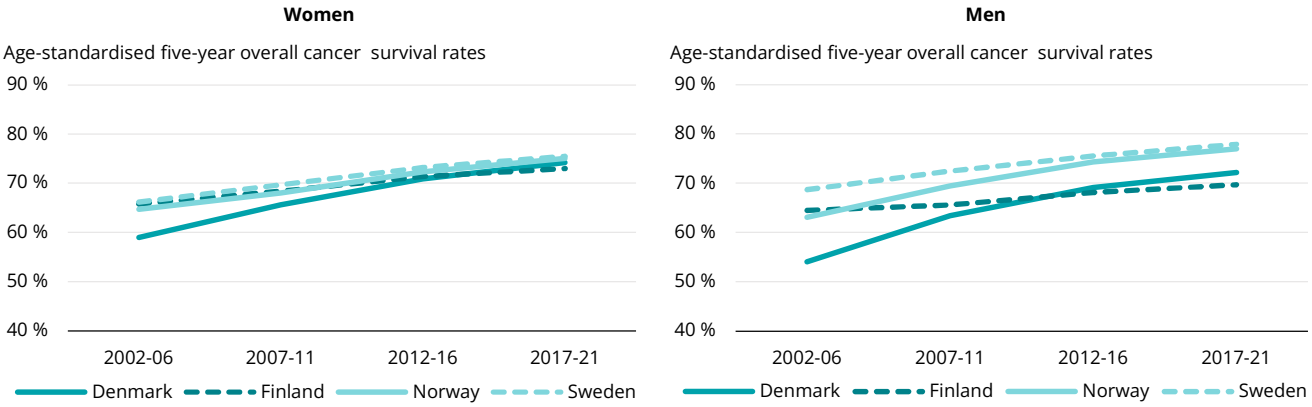
5.2 Quality

Cancer survival estimates have caught up with those in other Nordic countries in the last 20 years

Denmark has made successful efforts to improve cancer screening and treatment since the early 2000s, when the first phase of the National Cancer Plan was launched. This is evident in survival estimates – a key marker of care quality.

Between 2002-06 and 2017-21, age-standardised overall cancer survival increased from 59% to 74% for women and from 54% to 72% for men (Figure 18). While the survival rates in Denmark were well below those in other Nordic countries in 2002-06, they had caught up within about 10 years, and have kept improving slowly since then. For women, the survival estimate in Denmark was on a par with those in Finland, Norway and Sweden in 2017-21, while for men, the survival rate in Denmark was slightly above that of Finland (70%), but well below those in Norway (77%) and Sweden (78%).

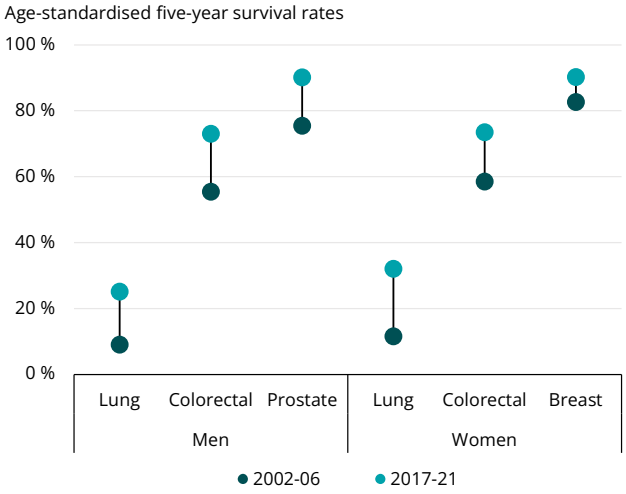
Figure 18. Cancer survival in Denmark caught up with other Nordic countries between 2002-06 and 2017-21



Notes: The five-year survival rate is the number of people who have not died from their cancer within five years of diagnosis. The time period refers to the time of diagnosis.
Source: Nordic Health and Welfare Statistics (Nordcan) website. From https://nordcan.iarc.fr/en/dataviz, accessed on 1 July 2024.

Comparisons of patients diagnosed in 2002-06 and in 2017-21 show that survival rates have increased substantially for the main cancers, including lung cancer (Figure 19). However, in Denmark – as in other Nordic and EU countries – the lung cancer survival rate remains below 33% and thus in the category of cancers with a poor prognosis. Therefore, promoting an environment favouring tobacco-free behaviours remains the key policy measure to avoid deaths from lung cancer (see Section 3).

Figure 19. Despite progress, lung cancer remains a cancer with very poor survival estimates



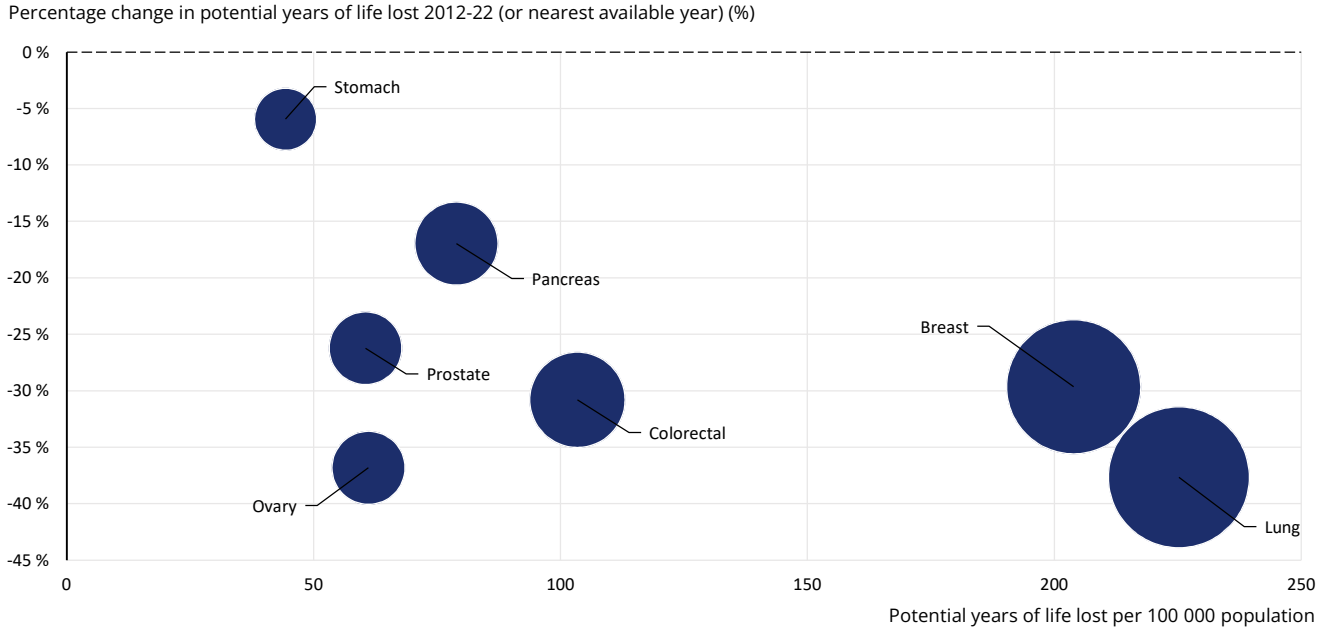
Notes: The five-year survival rate is the number of people who have not died from their cancer within five years of diagnosis. The time periods refer to the time of diagnosis.
Source: Nordic Health and Welfare Statistics (Nordcan) website. From https://nordcan.iarc.fr/en/dataviz, accessed on 1 July 2024.

People with lower socio-economic status are also less likely to survive after being diagnosed, despite very high public coverage and evidence suggesting no difference in access and delays in cancer care. However, prevalence of multiple chronic conditions is more common among people with lower than those with higher socio-economic status, and people with multiple chronic conditions have lower survival rates (Afshar N, English DR, Milne RL, 2021). Inequalities in survival rates are related to inequalities in risk factors.

Potential years of life lost in Denmark are declining over time

Potential years of life lost is an interesting complementary measure of the impact of different cancers on society, because it puts a higher weight on cancer deaths among younger individuals. Examining the change in PYLL over time across various cancer sites can point to improvements in cancer care systems via reductions in premature mortality. The rate of potential years of life lost (PYLL) decreased by 29% in Denmark for all the major cancers between 2012 and 2021, compared to 19% in the EU. In 2021, the cancers responsible for more PYLL were lung cancers with 225 PYLL per 100 000 population (Figure 20). Among women, PYLL due to breast cancer decreased by 30% while among men PYLL due to prostate decreased by 26% over time.

Figure 20. Potential years of life lost due to lung cancer decreased between 2012 and 2022



Notes: The rate of PYLL from breast breast, cervical and ovarian cancer is calculated in women only, while the rate of PYLL from prostate cancer refers to men. Pink bubbles signal an increase in the percentage change in PYLL during 2012-2022 (or latest available year); blue bubbles signal a decrease. The size of the bubbles is proportional to the PYLL rates in 2022.
Source: OECD Health Statistics 2024.

The Danish Comprehensive Cancer Centre aims to optimise cancer treatment

The Danish Comprehensive Cancer Centre, established in 2017, is a national collaboration to foster cancer research, prevention and treatment. Its aims include:

- co-ordination of cancer research by fostering collaboration among various research institutions, hospitals and universities in Denmark;
- improvement of cancer treatment by focusing on developing and implementing cutting-edge treatment protocols and technologies, and working to ensure that patients across Denmark have access to the latest and most effective cancer treatments;
- standardisation of care by setting national standards and guidelines for cancer care, thereby ensuring consistency in the quality of treatment and patient care across the country;
- increasing numbers of clinical trials by promoting and organising clinical trials and providing patients with access to experimental therapies;
- education and training of healthcare professionals, ensuring they are equipped with the latest knowledge and skills in oncology;

- public health initiatives, including supporting public health campaigns aimed at cancer prevention, early detection and awareness;
- policy development by providing expert advice to policy makers, helping to shape national cancer policies and strategies.

In addition, multidisciplinary decision-making processes play a crucial role in the management of cancer in Denmark. By involving specialists from various fields (oncology, surgery, radiology, pathology etc.), multidisciplinary teams develop individualised treatment plans that consider all relevant clinical factors and patients' need and preferences. These teams have been established in all major cancer treatment centres in Denmark.

Data monitoring on delays in cancer care was strengthened in Denmark

In April 2024, the National Audit Office revealed notable delays in cancer care in Denmark that exceeded maximum waiting times (Box 4). More positively, it found that there was no inequality in waiting times for cancer care by income or education.

Box 4. Legislation aims to ensure that cancer patients start their treatment no more than 14 days after consenting to it

Since 1999, a cancer patient in Denmark has the right to start treatment within 28 days of being referred for treatment, and within a maximum of 14 days of consenting to the treatment. If a region cannot start a patient's treatment within the time limit, it must present the patient with an opportunity to receive treatment elsewhere. If the region cannot find treatment elsewhere within the maximum waiting time, responsibility for referring the patient to a treatment offer passes to the Danish Health Authority.

According to the National Audit Office, in an estimated 6% of cases, corresponding to 6 400 cases between July 2019 and June 2023, patients did not start treatment within 14 days of consenting to the treatment, and without a valid reason for the delay. However, the National Audit Office noted that the guidelines for monitoring the compliance to the maximum waiting times rules were open to interpretation. In response, the Danish Health Authority has revised these guidelines, and implemented new measures for more effective real-time monitoring of waiting times. Between April and June 2024, a total of 64 442 diagnostic and treatment courses were registered in cancer care across Denmark. In 99.8% of cases, the rules on the maximum waiting times rules were respected.

The Danish Cancer Registry helps to enhance quality of cancer care

The Danish Health Data Authority is responsible for securely storing, monitoring and analysing aggregated population health data, including on cancer care. It is also responsible for managing the Danish Cancer Registry, which contains the time of diagnosis, cancer location and type. Furthermore, the extent of disease spread at the time of diagnosis is recorded, including details on how the diagnosis was made and the treatments administered within the first four months following diagnosis. The Registry covers the most common cancer types, and is instrumental in monitoring treatment outcomes that are used to inform healthcare policies and improve cancer care services. Population-based data from the Danish Cancer Registry is used to develop national clinical guidelines on cancer treatment, such as those supported by the multi-disciplinary cancer groups (DMCC.dk).

Measuring indicators of quality of care is a priority in Denmark

Patient-reported experience and outcome measures (PREMs and PROMs) in Denmark are consistently collected throughout the patient experience nationally, while prostate and breast cancer-specific PROMs are reported at the regional level. The Danish Regional Cancer Quality Programme has a cancer database for each type of cancer with various indicators, including survival and waiting times. A report is published annually for every database.

In addition, the Barometer Survey, a large survey of patients and former patients, is carried out every two years to measure patient-reported care quality. In 2023, 98% of patients rated their hospital treatment positively, with 71% rating it as excellent. Additionally, 60% of patients rated the diagnostic process and inter-hospital co-operation as excellent, and 50% rated the support from municipalities and GPs as excellent (Kraeftens Bekaempelse, 2024).

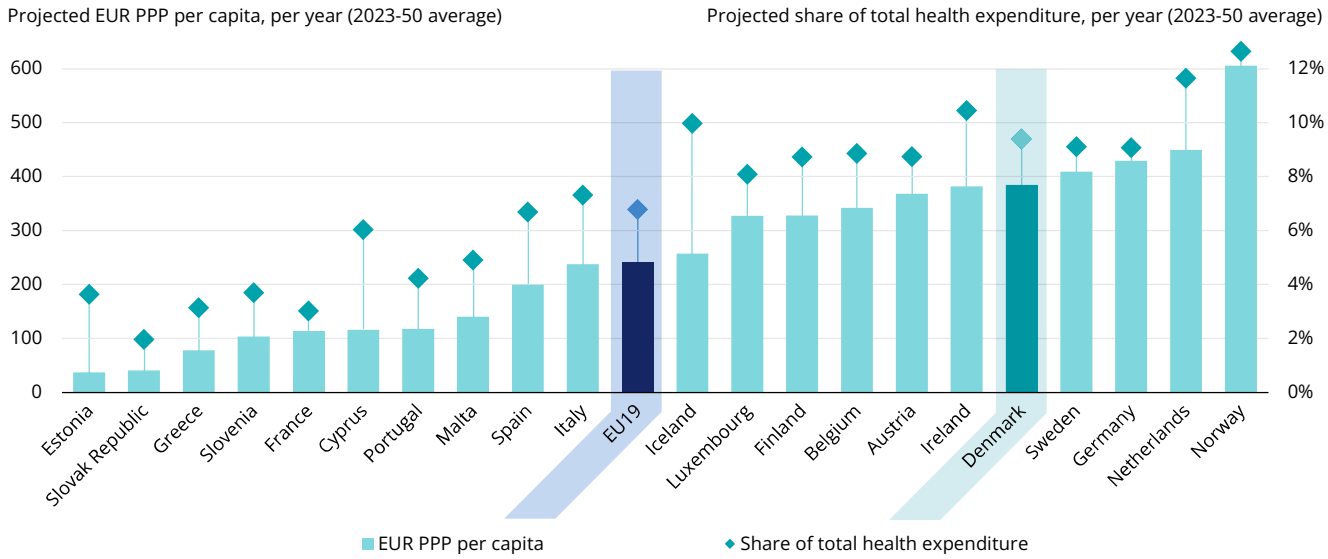
5.3 Costs and value for money

The projected cancer burden on health expenditure is one of the highest in the EU

According to OECD SPHeP modelling work, between 2023 and 2050, total health expenditure is estimated to be 9.4% higher in Denmark due to the

burden of cancer. This equates to an average of EUR (PPP) 385 per person per year (Figure 21). This figure is much higher than the EU19 average (EUR 242). Overall, the per capita health expenditure on cancer care is expected to grow by 35% in Denmark between 2023 and 2050, compared to 59% in the EU27. The burden of cancer in Denmark is estimated to be lower than in Norway and Sweden, but higher than in Finland and Iceland.

Figure 21. The burden of cancer on health expenditure in Denmark is projected to be higher compared to other EU countries



Note: The EU average is unweighted.
Source: OECD (2024b), Tackling the Impact of Cancer on Health, the Economy and Society, https://doi.org/10.1787/85e7c3ba-en.

The impact of cancer on employment is close to the EU average

According to OECD SPHeP modelling work, through its impact on reducing employment (combining unemployment and part-time work), cancer reduces workforce participation. When these effects are combined, Denmark is expected to lose the equivalent of 193 full-time workers per 100 000 population due to cancer on average over 2023-50. In addition, cancer is expected to lead to a loss of the equivalent of 46 full-time workers per 100 000 due to absenteeism and 52 full-time workers per 100 000 due to presenteeism[10].

5.4 Well-being and quality of life

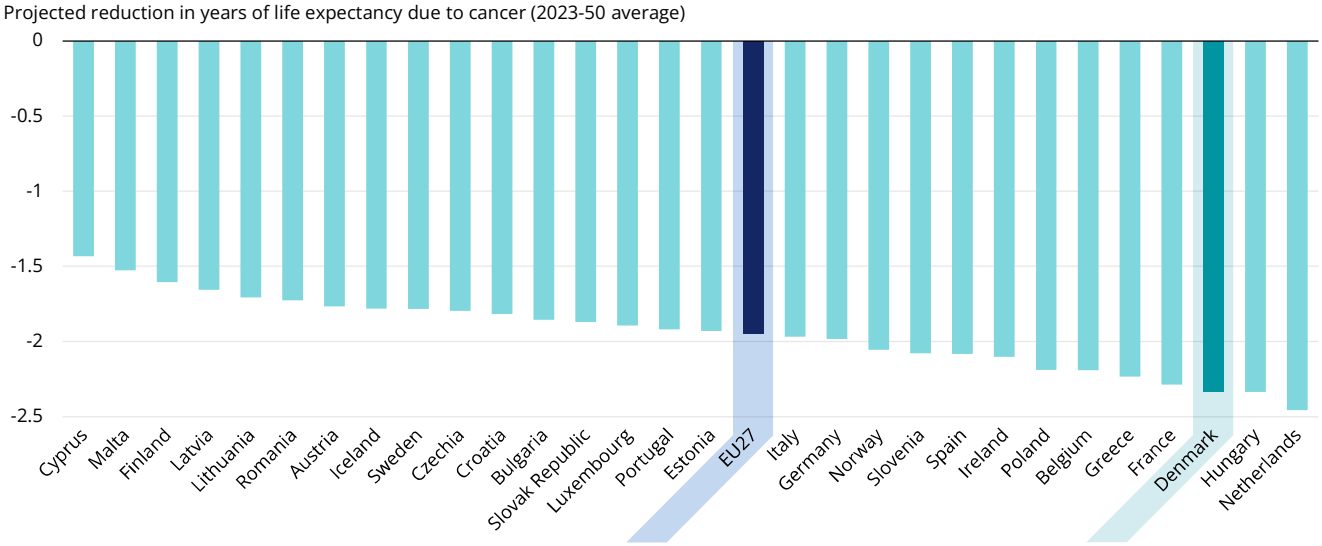
Cancer is anticipated to take a particularly high toll on Denmark in terms of reduction of life expectancy

Cancer is one of the main causes of death and disability in EU countries, and has a significant impact on well-being and quality of life. According to OECD SPHeP modelling work, in Denmark between 2023 and 2050, cancer will reduce population life expectancy by 2.3 years on average, compared to a scenario without cancer (Figure 22). This number is higher than the EU average (1.9 years), and represents more than a decade of progress in life expectancy. To put this number in perspective, it took Denmark 11 years (2012 to 2023) to increase its life expectancy by 2 years.

In addition, cancer takes a substantial toll on the mental health of the population through its associated symptoms and treatment side effects, and impact on daily life, social roles and work. According to the OECD's SPHeP model, Denmark is anticipated to have much higher depression rates because of cancer, at an additional age-standardised rate of 12 cases per 100 000 population per year. This is higher than in other Nordic countries including Norway (7 per 100 000), Iceland (8 per 100 000), although lower than the 17 per 1000 cases across EU.

10 *Presenteeism refers to lost productivity that occurs when employees are not fully functioning in the workplace because of an illness, injury or other condition.*

Figure 22. Cancer is estimated to reduce life expectancy by over 2 years between 2023 and 2050



Note: The EU average is unweighted.
Source: OECD (2024b), Tackling the Impact of Cancer on Health, the Economy and Society, https://doi.org/10.1787/85e7c3ba-en.

Patients and cancer survivors experience gaps in the support available to them

Cancer patients' need for information is not always met in Denmark. In 2023, about 16% of patients reported lacking information about side-effects, complications or disease severity, and 27% reported having insufficient information on potential long-term effects before starting treatment (Kraeftens Bekaempelse, 2024).

The forthcoming phase of the National Cancer Plan will aim to focus on side-effects, late-effects and quality of life of patients. The 2023 Barometer Survey revealed that many patients reported having unmet needs for support – particularly related to fatigue, sexual health, psychological issues and home care services. About 74% of patients reported experiencing significant daily life challenges 4-8 months following diagnosis, with two-thirds citing fatigue as a primary issue. Up to 74% of people diagnosed two years before the survey who had follow-up needs reported not receiving adequate support. About 80% felt they received insufficient advice on economic issues, and 78% felt they received insufficient advice on home care (Kraeftens Bekaempelse, 2024).

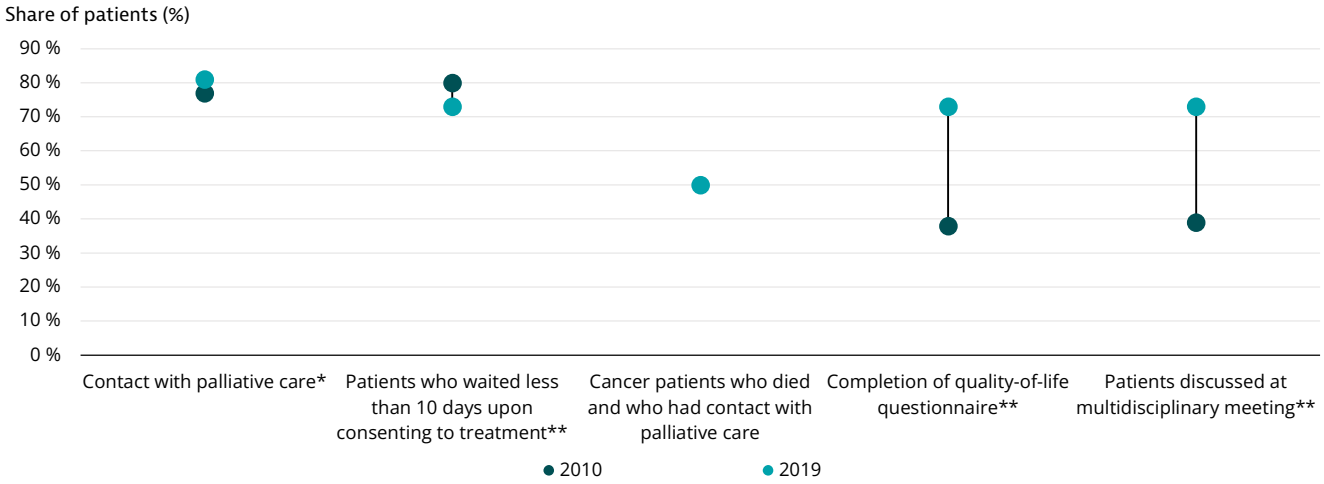
In Denmark, cancer patients and their close family have access to 12 psychologist appointments, with a 40% copayment with a GP referral. The Danish Cancer Society also offers a free hotline for patients and relatives, as well as professional counselling and other activities in 12 drop-in counselling centres across the country.

Palliative care is generally well structured for patients with cancer in Denmark

In Denmark, the first specialised palliative care units were established in the 1990s. By 2019, palliative care was delivered by 25 teams in hospitals and 19 in hospices, financed by the regions. Most patients treated by palliative care teams in hospitals are outpatients, whereas hospices mainly treat inpatients. Palliative care is free of charge. The Danish Palliative Care Database, established in 2007, comprises five quality indicators (Figure 23).

A 2024 study based on an almost complete national sample of data showed that all but the waiting time indicator improved between 2010 and 2019. The proportion of cancer patients waiting less than 10 days was higher for hospices (85%) than for palliative care teams in hospitals (66%) in 2019, although the difference may reflect their patient populations. The lives of patients in contact with hospices are shorter (a median of 20 days) than those of patients in contact with a palliative care team in hospitals (median of 66 days). Several other indicators were less good for hospices than for palliative care teams in hospitals, including the opportunity to complete of a quality-of-life questionnaire and cases being discussed in multidisciplinary meetings (Adsersen M et al., 2024). These findings suggest that palliative care has improved over the last decade, with greater potential for enhancement in hospices than among palliative care teams in hospitals.

Figure 23. Most quality indicators on palliative care improved between 2010 and 2019



*Notes: *Out of eligible cancer patients referred to palliative care; **Out of all cancer patients who had contact with palliative care.*
Source: Adsersen M et al. (2024).

In 2017, the Danish Health Authority issued new guidelines for palliative care, placing greater emphasis on patients suffering from non-cancerous diseases. However, these guidelines did not receive corresponding financial support.

A paid benefit is available for informal carers taking care of patients receiving palliative care

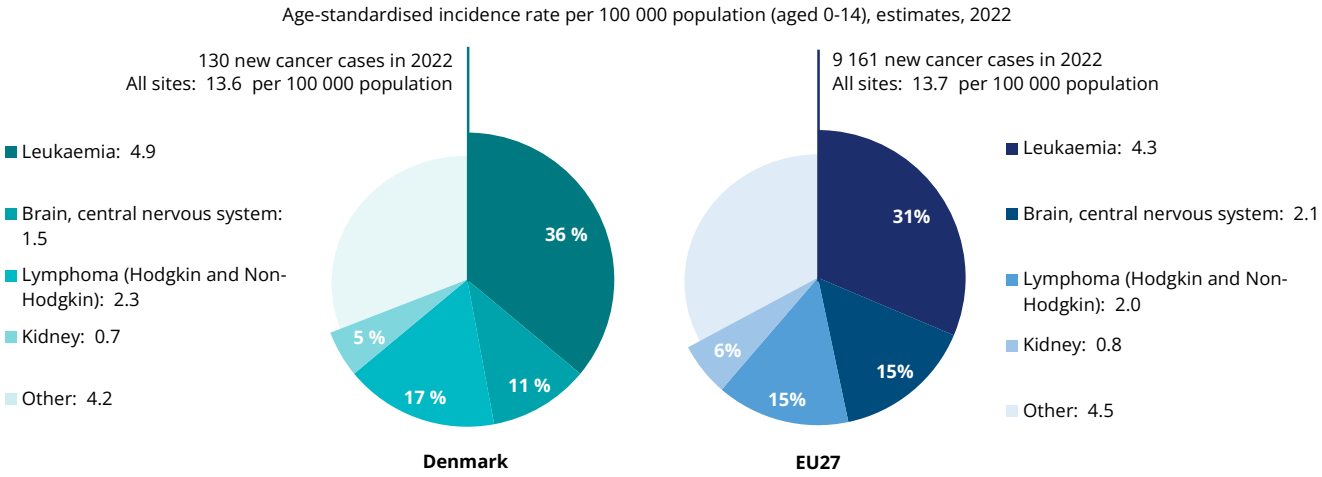
Family members and relatives can sign a contract with their municipality when they wish to take leave to care for a relative receiving palliative care and expected to die in the next 3-6 months. In compensation for the hours of care, they receive a benefit. The leave lasts six months and can be extended by three months. If the care recipient dies before the end of the contract, the benefit ends 14 days after the death of the care recipient. The caring allowance amounts to 1.5 times the allowance to which they would be entitled in the event of their own illness, or else EUR 2 230 (DKK 16 637) per month. If several people share the care task, the amount is reduced proportionally to the share of the care task undertaken. The number of beneficiaries increased slowly from 2 574 carers in 2014 to 2 770 carers in 2019 (Rocard and Llena-Nozal, 2022).

6. Spotlight on paediatric cancer

According to ECIS, it is estimated that in Denmark 130 children and adolescents up to age 15 were diagnosed with cancer in 2022. The cancer incidence rates in Denmark are similar to the EU average, at 14 per 100 000 children aged 0-14 (Figure 24), and slightly higher among boys than among girls. The most common cancer types are leukaemia with 4.9 cases per 100 000 children (36%), lymphoma, with 2.3 cases per 100 000 children (17%), brain and central nervous system cancers with 1.5 cases per 100 000 children (11%) and kidney cancer 0.7 cases per 100 000 children (5%).

In 2021, according to Eurostat, Denmark had lower mortality rate, with a 3-year average mortality rate 1.6 per 100 000 children, compared to 2.1 in the EU.

Figure 24. The cancer incidence rates among children in Denmark are similar to the EU average



Notes: 2022 estimates are based on incidence trends from previous years, and may differ from observed rates in more recent years. "All sites" includes all cancer sites except non-melanoma skin cancer.
Source: European Cancer Information System (ECIS) for cancer incidence. From https://ecis.jrc.ec.europa.eu, accessed on 10 March 2024. © European Union, 2024.

The Danish healthcare system offers an extensive array of treatments for children with cancer. The European Society of Paediatric Oncology (SIOPE)'s Organisation of Care & Research for Children with Cancer in Europe (OCEAN) Project identified that Denmark has four institutions treating children and young people with cancer. Righospitalet in Copenhagen is the designated Innovative Therapies for Children and Adolescents with Cancer (ITCC) Centre. The ITCC Consortium is a collaborative network providing access to innovative therapies for children and young people with relapsed or refractory malignancies (SIOPE, 2024).

All 13 infrastructural aspects and treatment modalities – such as brachytherapy, stem cell transplants, palliative care and chemotherapy – are available to care for paediatric cancer patients in Denmark. In addition, access to novel treatments is available. Of the 436 clinical trials involving paediatric and adolescent cancer patients in Europe between 2010 and 2022, 17% were running in Denmark. This is more than in Norway (8.5%) and Finland (6%). In addition, 93% of the 68 medicines identified as essential for treating cancer in patients aged 0 to 18 were available in Denmark, compared to 76% in the EU on average (Vassal et al., 2021).

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Country abbreviations

Austria	AT	Denmark	DK	Hungary	HU	Luxembourg	LU	Romania	RO
Belgium	BE	Estonia	EE	Iceland	IS	Malta	MT	Slovak Republic	SK
Bulgaria	BG	Finland	FI	Ireland	IE	Netherlands	NL	Slovenia	SI
Croatia	HR	France	FR	Italy	IT	Norway	NO	Spain	ES
Cyprus	CY	Germany	DE	Latvia	LV	Poland	PL	Sweden	SE
Czechia	CZ	Greece	EL	Lithuania	LT	Portugal	PT		

European Cancer Inequalities Registry

Country Cancer Profile 2025

The European Cancer Inequalities Registry is a flagship initiative of the Europe's Beating Cancer Plan. It provides sound and reliable data on cancer prevention and care to identify trends, disparities and inequalities between Member States and regions. The Registry contains a website and data tool developed by the Joint Research Centre of the European Commission (https://cancer-inequalities.jrc.ec.europa.eu/), as well as an alternating series of biennial Country Cancer Profiles and an overarching Report on Cancer Inequalities in Europe.

The Country Cancer Profiles identify strengths, challenges and specific areas of action for each of the 27 EU Member States, Iceland and Norway, to guide investment and interventions at the EU, national and regional levels under the Europe's Beating Cancer Plan. The European Cancer Inequalities Registry also supports Flagship 1 of the Zero Pollution Action Plan.

The Profiles are the work of the OECD in co-operation with the European Commission. The team is grateful for the valuable comments and suggestions provided by national experts, the OECD Health Committee and the EU Thematic Working Group on Cancer Inequality Registry.

Each Country Cancer Profile provides a short synthesis of:

- the national cancer burden
- risk factors for cancer, focusing on behavioural and environment risk factors
- early detection programmes
- cancer care performance, focusing on accessibility, care quality, costs and quality of life.

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